



**STATE OF NEW YORK  
DEPARTMENT OF HEALTH**

**Richard F. Daines, M.D., Commissioner**

**Jeffrey A. Kraut, Chairman**  
State Hospital Review and Planning Council

October 4, 2010

Richard Daines, MD, Commissioner  
NYS Department of Health  
Empire State Plaza  
Corning Tower -  
Albany, NY 12237

William Streck, MD, Chairman  
Public Health Council  
President and CEO  
The Mary Imogene Bassett Hospital  
One Atwell Road  
Cooperstown, NY 13326

Dear Commissioner Daines and Dr. Streck:

On behalf of the State Hospital Review and Planning Council (SHRPC) enclosed, is a "white paper" containing recommendations on the focus, structure and operations of the newly established Public Health and Health Planning Council (PHHPC).

The SHRPC membership believe it is important to successfully incorporate the responsibilities and valued traditions of the antecedent councils while continuing to innovate and create a new operating model to discharge policy, regulatory and oversight activities. This document includes the SHRPC collective wisdom and recommendations and we hope the PHHPC membership will find its contents useful as they begin to write the next chapter in the history of New York State health policy and planning activities.

As fifty years of SHRPC experience draws to a close we look back on its role in advocating for and changing New York's health care delivery system. SHRPC is proud of its legacy and of the foundation upon which the PHHPC members will confront the complex challenges in the years which lie ahead.

Richard Daines, MD, Commissioner  
William Streck, MD, Chairman  
October 4, 2010  
Page 2

The SHRPC members are available to assist in facilitating a smooth and successful transition.

Sincerely,



Jeffrey Kraut

JK/p

cc: Governor David Patterson  
Senator Tom Duane, Chair, Senate Health Committee  
Assemblyman Richard Gottfried, Chair, Assembly Health Committee  
James Clyne, Executive Deputy Commissioner, DOH  
Richard Cook, Deputy Commissioner, OHSM  
Thomas Jung, Director, Division of Health Facility Planning  
Julia Richards, Executive Secretary, SHRPC  
Members, Public Health Council

**Members of the State Hospital Review and Planning Council**

Michael H. Barnett, Esq.	Shelley B. Hirshberg
Howard S. Berliner, SC.D.	Thomas E. Holt
Russell W. Bessette, M.D.	Felicia A. Dyer Johnson
Christopher C. Booth	Richard K. Ketcham
Patricia Smith Bransford	Marc I. Korn
Sr. Pauline Brecanier, O.Carm	Anthony J. Lechich, M.D.
Vincent J. Calamia, Jr., M.S., M.D.	Arthur A. Levin, MPH
Carolyn K. Callner	Malcolm D. Reid, M.D., MPP
Robert M. Chur	Richard N. Rosenthal, M.D.
Joan S. Conboy	John Ruge, M.D.
Renee Garrick, M.D., FACP	Lucille K. Sheedy
James A. Ghent, Jr., Ph.D., J.D.	Louis B. Tehan, Jr.
Edwin T. Graham	Anderson Torres, Ph.D., LCSW-R
Ellen E. Grant, Ph.D.	Joel M. Zinberg, M.D., J.D.



**Recommendations Regarding the Structure and Operations  
of the  
Public Health and Health Planning Council**

**Report from the Membership of the  
State Hospital Review and Planning Council**

**October, 2010**

## **Members of the State Hospital Review and Planning Council**

Jeffrey Kraut, Chairman

Michael H. Barnett, Esq. , Chair, Project Review Committee

Howard S. Berliner, SC.D. Vice Chair, Planning Committee

Russell W. Bessette, M.D. Vice Chair, Major Medical Equipment & Appropriateness Review

Christopher C. Booth

Patricia Smith Bransford, Vice Chair, Information Systems Review Committee

Sr. Pauline Brecanier, O.Carm

Vincent J. Calamia, Jr., M.S., M.D.

Carolyn K. Callner

Robert M. Chur, Vice Chair, Project Review Committee

Joan S. Conboy

Renee Garrick, M.D., FACP

James A. Ghent, Jr., Ph.D., J.D., Chair, Fiscal Policy Committee

Edwin T. Graham, Chair, Major Medical Equipment & Appropriateness Review Committee

Ellen E. Grant, Ph.D., LCSW-R

Shelley B. Hirshberg

Thomas E. Holt, Chair, Codes & Regulations Committee

Felicia A. Dyer Johnson

Richard K. Ketcham

Marc I. Korn

Anthony J. Lechich, M.D., Chair, Planning Committee

Arthur A. Levin, MPH

Malcolm D. Reid, M.D., MPP

Richard N. Rosenthal, M.D., Chair, Information Systems/Vice Chair, Codes & Regulations

John Ruge, M.D.

Lucille K. Sheedy

Louis B. Tehan, Jr.

Anderson Torres, Ph.D., LCSW-R

Joel M. Zinberg, M.D., J.D.

**Recommendations Regarding the Structure and Operations  
of the  
Public Health and Health Planning Council**

**Report from the Membership of the  
State Hospital Review and Council  
October, 2010**

On December 1, 2010 the responsibilities and functions of the Public Health Council (PHC), established in 1913, and the State Hospital Review and Planning Council (SHRPC), founded 1960, will be combined into a newly established entity, the Public Health and Health Planning Council (PHHPC). The SHRPC actively supported the establishment of the PHHPC. It advocated for the merger of the Councils because SHRPC members recognized the need to continue to streamline and revise regulatory and oversight activities and keep pace with the changes which have occurred in the organization and delivery of health care services. The SHRPC's principal objective is to make recommendations to successfully blend the responsibilities and valued traditions of the antecedent Councils while continuing to innovate and create a new operating model to discharge the PHHPC's policy, regulatory and oversight activities. Additionally, SHRPC members believe the PHHPC will need to create policies and procedures which facilitate the transformation of the NYS health care delivery system as it confronts the challenges of health care reform. Thus, the SHRPC members have prepared this "white paper" for consideration by the PHHPC membership at its inception.

The formation of the PHHPC represents one of the most significant legislative restructuring of the state's regulatory structure for health services. Not by coincidence, this transition also comes on the eve of profound change for the national health care system itself as the health care reform legislation known as the Affordable Care Act (ACA) begins to take effect. The expectation is the ACA will focus on quality and value, put in place health insurance reforms, achieve cost savings through transforming the organization and payment of health care while making providers more accountable and reinvest those savings to increase access to care for millions. All of those initiatives will similarly be influenced by New York's own fiscal challenges. Given the broad objectives of health care reform it will also require a refocus of health care policy and regulations at the state level, some of which will come before the PHHPC.

**The Opportunity**

The PHHPC has been accorded statutory authority in three domains of policymaking; planning to establish goals and targets; rulemaking through codes and regulation to establish process; and application of those standards to particular projects. Thus, the PHHPC represents an opportunity to stimulate and streamline the making and execution of new health policy at a time when innovation and change has never been so important.

The ability to implement comprehensive and sustained process of health policy development has been challenging in New York State. In the 1970's and 1980's statewide efforts were aligned with federal initiatives as health system agencies (HSA's) were formed in regions throughout the state.

Statewide health planning which included broad-based public and professional input was also undertaken by Governor Hugh Carey through his Health Advisory Council and staffed by a special unit within DOH known as the Health Planning Commission. A similar charge was given to a Health Care Advisory Board by Governor Mario Cuomo. Under Governor George Pataki, the New York State Commission on Health Care Facilities in the 21<sup>st</sup> Century was established to conduct an independent review of health care capacity and resources and, through executive and legislative action, resulted in a reduction of New York State hospital and nursing home capacity. As a result of these actions the Healthcare Efficiency and Affordability Law of New York State (HEAL NY) was enacted to make investments in the state's health care delivery system by linking investment to key policy initiatives.

In decades past, health planning revolved largely around attempts to determine need, limit capacity and impose utilization controls. Needs assessment and right sizing activities of the SHRPC will continue to be a core activity of the PHHPC. It is important that bed need methodologies continue to reflect statewide health policy objectives in promoting access while avoiding excess development through capacity/service planning. However, the results of these activities should be implemented in a manner which is sensitive to regional differences and concerns.

A new opportunity for the PHHPC lies in facilitating and creating policy incentives which focus and enhance services across the continuum of care. In addition to traditional health planning initiatives, future policy development should incorporate a focus on creating accountability, measuring value and assuring smooth passage of patients along the spectrum of prevention, primary care, specialty services, acute care, rehabilitation services and long term care. Special attention needs to be focused on care transitions, especially for those with chronic conditions. Additionally, the requirements for electronic health records and interoperability along this continuum will provide the PHHPC multiple opportunities to facilitate a digitally powered health care system which can be enhanced with forward-looking policies and a contemporary regulatory framework.

### **SHRPC Experience**

The SHRPC experience in shaping health policy and impacting CON review provides the PHHPC with many useful examples which illustrates the ability to proactively address identified needs. The development of stroke centers, representative governance of dialysis centers, SPARCS reporting, electronic CON processing; regional health planning evolved from SHRPC initiatives. Recently, SHRPC took up the matter of proton beam therapy as a promising but costly technology well in advance of receiving any specific application for consideration. On the basis of deliberations with national experts in this emerging field, the SHRPC and DOH staff has formulated detailed recommendations to guide solicitation of prospective applicants and, embedded in an RFP process, the need to address identified policy concerns. This exercise in anticipatory policymaking may serve as a useful precedent activity for the PHHPC.

With respect to the functioning of the PHHPC, its committee structure, bylaws and operations, the SHRPC members want to highlight some issues which the PHHPC may find beneficial as they adopt their bylaws, rules and operating procedures.

## Committees

We are mindful of the legislative requirements accompanying the establishment of the PHHPC and recommend the creation of a streamlined committee structure which permits the PHHPC to carry out its work. In doing so, the SHRPC hopes that the PHHPC will agree that it is important to preserve the health planning and policy activities which were incubated in PHC and SHRPC Committees. Additionally, attention should always be paid to the efficient utilization of DOH staff time and resources in support of PHHPC committees and activities. Thus, the PHHPC may want to consider the following committee structure:

- **Executive Committee** – composed of chair, vice chair, committee chairs and executive secretary. Although the SHRPC had an Executive Committee it never met. However, given the range of responsibilities of the PHHPC such a committee may play a useful role in organizing the priorities and work of the PHHPC and serving as a sounding board to the Chair and DOH staff. However, we do not envision an Executive Committee taking any actions or discharging responsibilities which are in the domain of the PHHPC when it meets as a Council of the whole.
- **Establishment and Project Review** – The PHC Establishment and SHRPC Project Review activities should be combined with respect to CON and establishment activities. It is important to continue the restructuring of the CON submission, review and approval process so as to reduce the barriers and cycle time it takes for providers to comply with regulatory requirements as they attempt to respond to the rapidly changing environment.

Increasingly, PHHPC members will hear the term “level the playing field” as the service delivery system becomes populated with providers and for-profit agencies who are not regulated through Article 28, Article 36 or Article 40 of the Public Health Law. Given some of the new policy initiatives accompanying health reform we can expect new innovative approaches in health care delivery and payment, some of it regulated – some of it not. The PHHPC should be vigilant that the CON process does not become overly cumbersome and unnecessarily delay an applicant in implementing needed services that enhance community access, improves safety and quality or enhances the patient experience.

- **Codes, Regulations and Legislation Committee** – combines PHC Codes and Legislation Committee, SHRPC Codes and Regulation Committee and the Fiscal Policy Committee. SHRPC had a Fiscal Policy Committee which was frequently canceled and the issues coming before it, with the exception of major modifications in reimbursement methodology, did not warrant a separate committee. Although health care reimbursement regulations are quite complex, any proposed changes should be brought before the larger committee.
- **Health Personnel and Inter-professional Relations** – Maintain this PHC committee.
- **Health Planning Committee** – Consider combining the functions of SHRPC’s Planning, Major Medical Equipment and Information Systems Committees as well as the PHC Ad Hoc Prevention Committee. However, we do acknowledge there is a difference of opinion on this recommendation. Some consider that the Ad Hoc Prevention Committee should remain so as to maintain a visible presence of the PHHPC responsibilities in the area of Public Health, health promotion and disease prevention. Similarly, given the investment

and importance placed on transforming the health care delivery system around an infrastructure of inter-operable health information technology, a strong argument can be made to create a sub-committee which focuses on the myriad of clinical and legal issues surrounding privacy, consent and accessibility. Additionally, SHRPC sees the need to align its agenda in this area with that of the New York eHealth Collaborative and the Office of Health Information Technology Transformation, particularly at the nexus of policy, code and regulation.

The SHRPC Planning Committee, Major Medical Equipment and the Information Systems Committee have all incubated thoughtful discussions and policy initiatives which have shaped New York State health care. SHRPC members believe there is merit for the PHHPC to continue a focus on the availability of prevention activities, primary care, cost effectiveness and quality enhancements currently in process around the state. SHRPC was also in the process of updating Vent bed CON methodology and is awaiting the results of a survey which will be used to address the need for service expansion.

Consideration should also be given to create sub-committees of the Planning Committee, divided into the functional areas within the health care system, (skilled nursing/assisted living/long-term care hospitals, DTC's, home care) or functional initiatives such as prevention or information technology. This is particularly important as the PHHPC has to periodically revise bed need methodologies or as it solicits public comment about new or revised significant regulatory policies.

#### **Utilization of Advisory Committees**

Enabling legislation for the PHHPC stipulates that PHHPC *“shall appoint one or more advisory committees expert in the major areas of public health concern, including but not limited to health education, health manpower, economics, and delivery of health service, sanitation problems and inter-professional relationships.”* This authority may also provide a useful framework for incorporating other major health care policy initiatives which may overlap with the 57 Councils and Advisory Boards overseen by DOH. Working in concert with the Commissioner of Health, the PHHPC has an opportunity to set a planning agenda that should be both broad and inclusive to best meet the challenges ahead.

Advisory committees can serve as productive venues to incorporate outside expertise and gain additional insights on a subject area outside of the traditional committee structure. Many times, an issue is so important or complex that insufficient time is available during regular committee meetings to educate the committee, permit thoughtful discussion and provide adequate time to debate alternative approaches to policy development. The SHRPC is supportive of the PHHPC's ability to establish advisory committees which may provide a practical tool to discharge some of its work.

The use of advisory committees also provides a useful venue for PHHPC members to have the ability to raise and discuss substantive policy concerns about a project. Some SHRPC members have expressed frustration by discussions of an individual CON when a related policy issue is raised during Project Review. For example, this occurred during the discussion of an Emergency Department expansion project where members wanted to address the larger issue of access to primary care. There was a desire for a sub-committee to be established in the Planning Committee to advance this discussion and make recommendations on how to advocate for meaningful policy development.



Advisory Committees can also sometimes take on a life of their own and dilute the activities of the body which formed them. Thus, the PHHPC should develop guidelines regarding their purpose and term and articulate the process to identify and select non-PHHPC members to serve on them. It is also important that the PHHPC Bylaws permit these advisory committees to meet and work between regularly scheduled meetings of the full PHHPC and its regular committees.

### **Regular Meetings**

The PHHPC should have the flexibility to add additional committee meetings when necessary. It may want to consider scheduling eight (8) meetings the first year just in case it has to discharge a backlog of work as a result of the merger and try to reduce this number to six (6) meetings thereafter.

### **Joint Education & Policy Meeting**

Consideration should be given to have an annual health policy educational meeting of the PHHPC and invite members and leadership from all other relevant DOH committees which may impact the work of the PHHPC, such as:

- Cardiac Advisory Committee
- Minority Health Council (health disparities and accessibility)
- Transplant Council
- Stem Cell Committee
- Emergency Services
- Perinatal
- AIDS Advisory
- Behavioral Health, Mental Health, Substance Abuse and Alcoholism
- Rural Health
- Regional Trauma
- SPARCs

Although a single annual meeting may be insufficient to align health policy, it can provide a useful forum to discuss issues of common concern or highlight a policy change which has broad implications across the care continuum.

### **Bylaws**

A very careful analysis of the Bylaws of both PHC and SHRPC should be undertaken to create a new set of bylaws which not only provides a clear set of rules to carry out the work of the PHHPC but also permits some degree of flexibility in how the PHHPC discharges its responsibilities. This is particularly helpful when there is discussion only with no vote being taken. Additionally, it is important that the PHHPC adopts practical guidelines and integrates contemporary methods in order to define and achieve a voting quorum (e.g. member participation via teleconferencing), see voting procedures below.

Obviously, there is no issue with requiring a quorum to hold a meeting and take action. However, there were several instances where a quorum could not be achieved or maintained for a vote to take place. Thus, we recommend a vote that is needed to take action be based on a majority of all members of the Council or committee – whether they are present or not.

## **Voting Procedures**

The PHHPC should incorporate the voting process adopted by the PHC which batches applications in the event DOH recommends approval; no member has a question and no members of the public wishes to speak against the application. This could compress the portion of the agenda where there is no opposition and permit time to be focused where it is needed.

With a reduced number of PHHPC members, it increases the possibility that, although a quorum is present, it may take a unanimous vote of those present to take any action. This could cause significant and potentially detrimental delays for applicants or DOH initiatives.

With respect to achieving a quorum:

1. The rules and regulations about the conduct of PHHPC meetings could specifically permit votes by members participating by tele or video conference.
2. If action needs to be taken on a specific issue where the members have received all documents prior to a meeting at which no public comments are entertained, then those who are not attending (in person or remotely) can record their vote prior to the meeting by email/fax etc.
3. Change the voting requirement to a majority of those present at a meeting where a quorum is present.
4. As an option to 3 above, the voting requirement is less than a majority of all members but more than a majority of those present at a meeting. For example, 25 members, quorum of 13, but vote for approval would be 8, 9 or 10 instead of a simple majority of 7. In any event, action could be taken without the need for 13 "yeas".

The intent of this recommendation is not to vest power in fewer persons but provide workable options for the PHHPC to discharge its responsibilities. Additionally, we recognize that some believe video conferencing is an inadequate substitute for face-to-face communication and interaction. However, as the technology improves and more options become available we are hopeful videoconferencing will be embraced as a useful tool to broaden participation.

Additionally, PHHPC members should be annually oriented on a review of voting procedures to include a discussion of the right to "abstain" to better understand how the failure to approve or disapprove a project impacts the applicant when insufficient votes are cast for an action to occur. This issue will also be affected by a revision of the voting procedures to limit projects which are occasionally placed in a "regulatory limbo".

## **Ethical Conduct**

The integrity of the PHHPC must be above reproach. The ethical conduct of PHHPC activities and its members must be clearly defined and vigilantly pursued. We appreciate the gray areas which appear when a council composed of industry representatives are appointed to participate in the regulation and oversight of the industry they come from. This is why each PHHPC member has an individual and collective responsibility to police and safeguard the integrity of the PHHPC. Members should have a thorough understanding of the guidelines regarding ex-parte communication, conflicts and interests.

Before members are appointed to PHHPC committees they should be required to complete the Conflict of Interest statement so an evaluation can be made of the potential of losing a quorum due

to conflicts. As you know this is particularly important for those serving on the Establishment and Project Review Committee. Currently, the practice is for conflicts or interests on a project to be acknowledged and forwarded to the Executive Secretary without comment. We recommend a new standard be established where the nature of the conflict or interest should not only be declared but stated in writing and available to the applicant and public as well as other members of the PHHPC.

It is important that each PHHPC member exercise their right to object when a member declares an interest instead of a conflict. Some SHRPC members believed there were times when they thought a member should have declared a conflict rather than an interest but, not knowing the nature of the interest, were unable to object. If the member who declared an interest had to publically announce their reason, we suspect they would have declared a conflict and removed themselves from the meeting. Some preliminary thoughts on this issue include:

**Member Conflict** – When a member declares a conflict the reason for that conflict should be set forth in writing and transmitted to the Executive Secretary 48 hours before the meeting. All reported conflicts should be collated and become part of the minutes and record of the PHHPC made available to the public.

**Member Interest** – Similarly, members should state in writing the reason why they have declared an interest rather than a conflict and transmitted this information to the Executive Secretary 48 hours before the meeting. All interests should be collated and made available to the public, PHHPC members and become part of the record. At the outset of the Establishment/Project Review the Chair should reference the declaration of interest statements of PHHPC members and ask if there are any objections. If an objection is raised the Chair should rule on the objection so the Committee meeting could proceed with its agenda.

### **Transmittal of Information to PHHPC Members**

Frequently, SHRPC members receive supplemental information directly from applicants prior to a meeting and often when there is controversy at a meeting. At times, SHRPC has discouraged the practice of handing out last minute information at a meeting by refusing to consider the information but this practice has been applied inconsistently. The SHRPC tends to accept documents at a meeting when DOH has had time to validate their contents.

The Bylaws should specify the timeframe to transmit and how an applicant or member of the public should transmit information to PHHPC members. We believe the current PHC Bylaws provide guidance on these issues and should be expanded to better manage the process.

### **Meeting Location**

SHRPC has attempted to increase public participation and was planning to hold one of its meetings in western New York in 2010. However, the State's fiscal crisis led to a cancelation of that initiative. We strongly suggest the PHHPC should convene a meeting in western, central or northern New York. The bylaws should contain language that biennially, one meeting of the Council must be held in a location other than New York City and Albany. We understand the burden this places on DOH staff and PHHPC members, however, if this recommendation is adopted the PHHPC should codify this commitment and write into its bylaws.

## **Orientation of Members**

The PHHPC should create a comprehensive orientation packet and program for all members. At the formation of the PHHPC all members should be oriented on their new responsibilities regardless of their prior experience on either Council. All new members appointed thereafter should be required to participate in an orientation program which should be scheduled within 60 days of appointment.

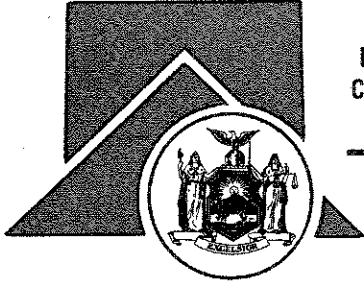
## **Public Participation**

We could fill a page with anecdotes from Project Review and Codes and Regulations meetings which illustrate the challenges of informing the public, industry and professional associations about projects placed on the agendas of these committees. We are particularly sympathetic to the frustrations expressed by the lay public who want to comment on a project but are not able to easily follow the project review and approval process.

DOH staff has been responsive to this concern and has created a list-serve sign up so individuals are notified by email of the availability of the agenda and impending project reviews. The soon to be implemented NYS E-CON system will respond to this issue in a very substantive fashion. However, it is important the PHHPC continue to be supportive of DOH staff efforts in this area and to advocate for timely notification of PHHPC agenda, accessibility to relevant documents and an opportunity for the public to comment, or those in opposition to speak, before a decision is rendered.

## **Summary**

The SHRPC membership believes the PHHPC affords the public and health provider community the promise of a new and improved process to discharge the collective responsibilities of the PHC and SHRPC. The enabling legislation is the beginning and a continued focus by the PHHPC members on transparency, integrity and the development and implementation of fair and efficient operating rules, policies and procedures will deliver on this promise.



STATE OF NEW YORK  
DEPARTMENT OF HEALTH  
CORNING TOWER BUILDING  
ALBANY, N.Y. 12237

# PUBLIC HEALTH COUNCIL

---

November 12, 2010

Richard F. Daines, M.D.  
New York State Commissioner of Health  
Empire State Plaza  
Corning Tower, Room 1495  
Albany, New York 12237

Dear Dr. Daines,

On behalf of the Public Health Council of New York State, I write to offer thoughts and recommendations on behalf of the Council regarding the planned combining of the Public Health Council and the State Hospital Review and Planning Council. The new legislatively established Public Health and Health Planning Council (PHHPC) offers opportunities for continuing the rich traditions of the two Councils, opportunities that will need to be carefully considered in establishing the operational framework of the new PHHPC. In this context, we would offer the following observations for your consideration.

## **Histories of the Public Health Council and the State Hospital Review and Planning Council**

The Establishment of hospitals was historically the responsibility of the State Board of Social Welfare, and oversight over hospitals was shared by the Departments of Health and Social Welfare. The Board of Social Welfare held the constitutional responsibility for "the visitation and inspection of hospitals." In the early years of health planning, a Joint Hospital Survey and Planning Commission was created in 1947, as a temporary Commission comprised of the Commissioners of Health, Social Welfare and Mental Hygiene. Seven regional advisory hospital planning councils were created to assist the Commission in formulating plans for the administration of federal aid for the construction of hospitals under the Hill-Burton program. Very soon it became apparent that costs were rising dramatically, hospital construction was increasing and rates of occupancy were decreasing. There was a perceived need to gain control over the rapidly growing system, and the Joint Legislative Committee on Health Insurance Plans, headed by Senator George Metcalf, was appointed to make recommendations. Their work resulted in

the passage of the Metcalf-McCloskey Bill in 1964. [2] This legislation created the State Hospital Review and Planning Council (SHRPC) and gave it, along with the preexisting regional planning councils, statutory responsibility to "study and make recommendations to the Board of Social Welfare as to the public need for construction, reconstruction and modernization of hospitals in their respective jurisdictions." [3] The Board of Social Welfare would receive the recommendations of the SHRPC and before making its decision to incorporate or establish a hospital, make a determination as to the (i) public need for the existence of the institution, (ii) the character, competence, and standing in the community of the proposed incorporators, directors or sponsors, (iii) the financial resources of the proposed institution and its sources of future revenue; and (iv) such other matters as it deemed pertinent.

One year after the Metcalf-McCloskey Act, a major change in the regulation of hospitals was enacted by the addition of a new Article 28 to the Public Health Law. In this legislation, the "determination of need" process for construction was moved to the Department of Health (DOH) (after recommendation by the SHRPC) and a licensure process for hospitals under the authority of the DOH was instituted. The Board of Social Welfare continued to have the responsibility for approving the incorporation and establishment of hospitals, and to consider in that process the recommendations of the SHRPC on need and the approval of the Commissioner of Health on licensure. The Metcalf-McCloskey Act and Article 28 of the PHL are regarded as the first state Certificate of Need (CON) programs to be established in the country. They adopted, virtually in their entirety, the recommendations of the Folsom Committee, a committee appointed by Governor Rockefeller and chaired by Marion B. Folsom, the Secretary of Health, Education and Welfare in the Eisenhower administration. Mr. Folsom was later a member of the SHRPC, and Senator Metcalf was appointed later to the Public Health Council and was the first chairman of the Establishment Committee.

### **History of the Role of the Public Health Council in Public Health**

On May 17, 1913, Governor Sulzer signed a bill establishing the Public Health Council, a seven member advisory group. The bill establishing the Public Health Council provided for reorganization of the State Health Department, gave the Commissioner power to enforce the Public Health Law and to have supervision over the local health departments. However, indisputably the most important provision in creating the Public Health Council was to give the authority to the Council to enact a State Sanitary Code for the entire State outside of New York City.

By 1914, the Council established the first seven Chapters of the Sanitary Code relating to definitions and general provisions, communicable diseases, milk and cream, midwives, labor camps, nuisances and a miscellaneous chapter prohibiting the common towel and common drinking cup.

In recent years, the Council has continued to use the State Sanitary Code to improve public health in communities. For example, in February of 1987 the Council enacted comprehensive sanitary code regulations governing tobacco smoking in areas open to the

public. Although these regulations were the subject of legal challenge, they led the way for the passage of the New York State Clean Indoor Air Act in 1989, strong anti-tobacco legislation now enforceable in New York State. The Council adopted environmental health regulations to assure a sanitary, healthful and safe environment for the public when using recreational aquatic spray grounds. It modernized the job descriptions and minimum qualifications of public health personnel to strengthen the leadership and expertise of critical staff working in local health departments.

The Council also was given a major role in public health policy. Chapter 559 of the Laws of 1913 state that the "Council... shall, at the request of the commissioner of health, consider any matter relating to the preservation and improvement of health, and may advise the commissioner thereon; and it may from time to time submit to the commissioner any recommendations which it may deem wisely."

The Public Health Council has a long and distinguished history of leadership in public health policy. It has reviewed a number of specific public health programs and initiatives including obesity, flu vaccine, women's health issues and HIV/AIDS. It has also established ad hoc committees to assess and address major public health issues including setting statewide public health goals, strengthening the public health infrastructure, and making improvements related to the public health workforce. Some of its recent initiatives include:

- 1993: Immunization of Pre School Children: An Ad Hoc Committee examined barriers to appropriate immunization of pre-school children and made recommendations to address them including strengthening primary care, increasing outreach, simplifying administrative procedures and establishing an immunization registry that mandates reporting of immunizations.
- 1996: Communities Working Together for a Healthy New York. This committee hosted public hearings across the state to identify public health objectives in 12 priority areas for New York to achieve by 2006, and issued a report that served as a blueprint for improving community health.
- 2003-2008: Public Health Infrastructure Workgroup. This committee, made up of national, state and local leaders in public health reform, issued a report Strengthening New York's Public Health System for the 21st Century with recommendations to strengthen the public health workforce, organizations and data and information systems.
- 2008- ongoing: Prevention Agenda toward the Healthiest State. The Agenda established a set of ten prevention priorities and disease reduction goals, required joint hospital and county public health department planning efforts to assess and address priorities, and is focused on supporting communities to use data and evidence based interventions

## **The Public Health Council and its Establishment Responsibilities**

In 1970, legislation was enacted to transfer to the Council from the State Board of Social Welfare the responsibility for overseeing the establishment of medical facilities.<sup>[4]</sup> Subsequent changes in statute extended the Council's authority to approve the establishment of certified home health agencies, hospices, and licensed home care services agencies. The Legislative Memorandum of the DOH in response to the 1970 legislation stated that the purpose stated for the change was to "unify the control and supervision of the establishment and operation of medical facilities;" the role of the Public Health Council would be comprehensive and would include both planning functions and setting standards for both construction and health care services.

The powers transferred to the Public Health Council in 1970 were the same broadly granted powers that had been those of the Board of Social Welfare: to act on public need, character and competence, and the financial resources of the proposed institution. Because of the historic role of the Board, which was conceived as a constitutional citizen body with decision making authority, the role transferred to the Public Health Council was unique and distinct from the SHRPC. The SHRPC concerned itself with much of the same subject matter, but its role was as a recommending body, the Public Health Council was the decision-maker. In its "Establishment" role, the Council's authority was limited by important safeguards against potential abuses which included hearing rights. But stronger indications of the legislative intention to insulate the Council from undue political pressures were built into the law: the final decision making authority was placed in this citizen body; its actions were subject to public scrutiny; its meetings were public, and its members were appointed for a term rather than serving at the pleasure of any public official. An indication of the seriousness of the concern regarding the potential for political abuse is well expressed in a letter submitted to the Legislature by the Catholic Welfare Committee in 1965:

"We believe that the ultimate power, the final authority over the right of voluntary organizations to exist and grow to meet their responsible objectives in the public interest, should rest in a multi-member body such as the legislature or a board or commission. In our democratic society, such power should never be granted to a single person. Such power is too precious to permit of possible abuse." <sup>[5]</sup>

In 1971, a new subsection was added to Public Health Law section 2801-a authorizing the PHC to adopt and amend rules and regulations to effectuate the establishment process, and "to provide for the revocation, limitation or annulment of approvals of establishment." Over the years these regulations have been modified a number of times, however the fundamental design of the establishment function has not changed.



## **Current Function of the PHC**

Under the broad themes of policy and regulation, the roles of the PHC fall into four operational categories, much in line with the historical responsibilities outlined above. These roles are found in the committee structure of the current Council and the framework used to organize the agenda for the meetings of the PHC. This structure is as follows:

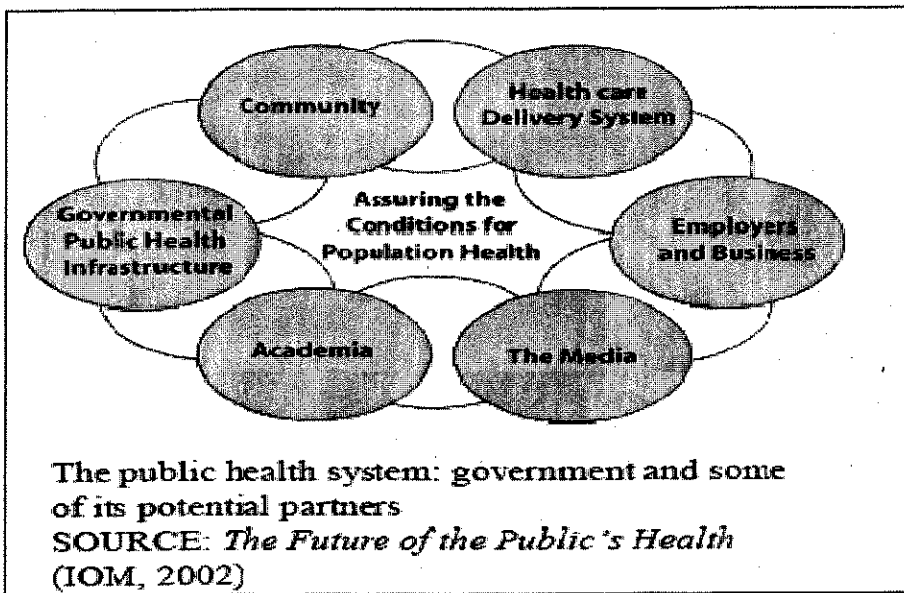
- Establishment – exercise of the statutory authority to approve the establishment of health care facilities and home care agencies.
- Codes and Regulation – sanitary code and other regulations
- Policy – Department of Health issues or other items at the discretion of the Commissioner.
- Public Health – often longer terms studies or analyzes of the health needs of the public, as well as reports and information from the Office of Public Health.

In actual practice, the work of the Council is most evident in the proceedings of the Establishment Committee during the meetings and the Public Health policy work outside of the meetings. In forming the Public Health and Health Planning Council each of these two areas requires careful consideration.

## **Public Health Policy**

As noted in the Institute of Medicine report, *The Future of the Public's Health in the 21<sup>st</sup> Century*, the health of the public requires the interaction of multiple actors in society, collaboration across government agencies and between government and non-governmental sectors (see diagram below). The personal health care delivery system, in fact, plays an important but small role in achieving broad health objectives. Governmental public health agencies have a central role to play as “the backbone” of a public health system, but cannot assure the highest possible health result alone.

Within its statutory boundaries, the new Public Health and Health Planning Council has an opportunity to facilitate more integrated planning and policy development to assure the health of the public. This means strengthening the emphasis on identifying community health needs and the interventions that can most effectively address them, as a driving force in decisions about “right-sizing” the State’s personal health care system, as well as implementing public health policies and programs. There must be better alignment of the incentives and interests of the critical actors to create more integrated health systems in communities and assure that limited resources are utilized to achieve the best health result.



This approach will position NYS to respond most effectively to both the requirements and opportunities created by the health systems reforms included in the Affordable Care Act (ACA). For example:

- The National Prevention, Health Promotion, and Public Health Council was chartered to create a **national prevention strategy**, coordinating across all executive departments and agencies, for prevention, wellness, and health promotion practices, the public health system, and integrative medicine in the United States. The Council is expected to promote a “Health in All Policies” approach that shares responsibility among all government agencies for assessing the health impact of new policies and projects that are proposed. The new PHHPC could play an analogous role in New York State.
- Accountable Care Organizations and Medical Homes will require more integrated systems of care and greater emphasis on prevention.
- Hospital Community Benefit Changes. In an effort to encourage preventive, population-based health care in addition to charity care, the ACA’s new rules require hospitals to conduct community health assessments and describe how their community benefit efforts respond to that assessment. The NYS Prevention Agenda, with support from the Prevention Agenda Leadership Group (which unites local health departments, health care systems, and community organizations under the leadership of the ad hoc Prevention Committee), has helped pave the way for New York hospitals to fulfill this requirement. It calls upon hospitals to use a collaborative approach for community health assessment and planning. There were examples of excellent partnerships among hospitals, local and district public health agencies and community based organizations in designing community service plans for the 2010-2012 cycle, but most communities need additional support and guidance to effectively carry out this responsibility.

- Community Transformation Grants. ACA authorizes annual appropriations for Community Transformation Grants (CTGs). The CTGs represent the next wave in disease-prevention funding. The grants call for community-wide changes to promote healthy living and reduce disparities. Unlike previous CDC and DHHS grant programs, they are not limited to addressing one disease at a time and instead seek broad health promotion. New York's governmental infrastructure must be ready to respond to this unprecedented type of investment in health. Additional cycles supporting such community based prevention are expected.
- Community Health Centers and FQHC look-alikes - There is \$12 billion dollars slated for investment in expansion of Community Health Centers over the next decade. This yields an opportunity for expanding the role these centers can play to meet community health needs beyond pure volume increases. Many hospitals are likely to plan to convert their outpatient departments to these models to promote more integrated systems of care and take advantage of more generous reimbursement.
- Investments in Governmental Public Health Infrastructure - The ACA provides funding to strengthen state and local public health agencies, and there is considerable momentum towards **accreditation** of state and local public health departments. The Public Health Accreditation Board, a national nonprofit funded by CDC and the Robert Wood Johnson Foundation, has developed standards to promote quality improvement and high performance in health departments. National accreditation will start on a voluntary basis in 2011. Demonstrated community collaboration is among the required standards. The NYS Department of Health and the local health departments should be prepared to fulfill these national standards.

### **The Establishment Committee Role**

The Establishment Committee has had a long tradition of thoroughness in its deliberations leading to its recommendations to the full Council. As the CON process itself has changed, the role of the Committee changed accordingly. Federal initiatives such as the Comprehensive Health Planning Act of 1966, and later the National Health Planning and Resource Development Act of 1974, created planning structures whose goals were to elicit community involvement, both of providers and consumers, in the CON process. Beginning in the mid-1970's there were regional "Health Systems Agencies" (HSAs) which played a major role in providing the public with the ability to participate in the decisions regarding establishment applications. The federal mandate for these entities was repealed in 1978, and today only a very small number of HSA's remain active in NYS. For the vast majority of applications, the only formal opportunities for public discussion and challenge to establishment applications were the Project Review Committee of the SHRPC and the Establishment Committee of the PHC.

While the HSA system was not free of political interference, the current system has meant that applications remain largely shielded from public scrutiny until much farther along in the approval process. With the elimination of the HSAs, the dangers, or at least the perception, of political interference is protected against only by the rules of the PHC itself and the integrity of its members. The rules, which are in the form of conflict of interest

rules and ex-parte communication prohibitions, are contained in the by-laws of the Council. The Public Officers Law and general principles of law and ethics also bear on the Committee's activities. In a setting in which conflicts of interest are frequent and unavoidable, and sometimes difficult to interpret in a practical manner, there is a need for constant vigilance on the part of the members and staff of the Council. The traditions of the Establishment Committee and the Council have been important protections in this regard.

Perhaps the most important tradition follows from the history discussed above: with the knowledge that the PHC was created for the explicit purpose of guarding establishment decisions against both political and private interests, members have been careful to base their decisions on criteria disclosed to the public and relevant only to the interests of the public and the communities affected. Members of the Establishment Committee particularly have been called upon to remain cognizant that they represent public, and not private or politically favored interests. In this respect, one important role of the committee has been to shield the DOH staff, whose decisions may be unavoidably affected by other considerations. Private conversations with lobbyists or other interested parties that may affect applications before the Committee have been strenuously avoided.

For the new merged council there should be clarification of these principles and a renewal of the historical traditions of the Establishment Committee and the PHC. There needs to be a clarification of whether the new Council is meant to be an opportunity for debate among interested elements of the health delivery system, which has been the important role of the SHRPC, or if it is meant to be a continuation of the role of the PHC, whose members represent only the public, or if it is meant to serve both functions. An explicit expression of these intentions along with a process for Committee and Full Council decisions must be developed if the new Council is intended to continue the role of the PHC with any success. Ultimately, however, it is the integrity of the members and their adherence to duty to the public, even in derogation of political and private interests, which must be strengthened if the new Council is to serve well the citizens of the State.

### **Implications for PHHPC Committee Structure**

To achieve the kind of integration required by the new health and public health environment, the following recommendations should be considered as a final Committee structure is developed for the new PHHPC.

**Executive Committee** – composed of Chair, Vice-chair, Committee chairs and the Secretary

**The Establishment and Project Review** activities and responsibilities must be clearly delineated. As noted above, a process of review and debate which is characterized by interactions with many parties characterizes the Project Review activities under the current process. The Establishment process comes from a history of more statutory responsibility. The clarification of these roles in any committee structure is a most important part of the early development of the new Council.

**The Health Personnel and Inter-Professional Relations Committee** has a limited focus and would not change.

**A Codes, Regulations, and Legislation Subcommittee** that combines both Councils' Codes and Regulation Committees and the Fiscal Policy Committee of SHRPC should be formed that includes in its responsibilities reviewing and proposing changes in law and regulation that affect public health, beyond fiscal and reimbursement issues. This activity is already required in relation to the Sanitary Code. The committee would also be poised to advise on regulation and legislation from other sectors that may positively or negatively affect the public's health.

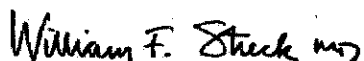
**A Health Planning Committee** that combines functions of SHRPC's Planning, Major Medical and Information Systems Committee should be formed. The new Planning Committee should explicitly include in its responsibilities the integration of public health priorities and programs with its health care systems planning responsibilities in order to achieve the alignment of actors and interests needed for a health system that promotes health as envisioned by the IOM. This committee should develop systems that relate public health indicators and population health needs to the implementation of health systems changes.

**A Public Health Committee** is needed to specifically address the statewide governmental public health infrastructure (including workforce, IT, laboratory and other organizational capacity consistent with the Essential Public Health Functions<sup>1</sup>) and support actions to assure readiness for future public health agency accreditation and public health workforce certification. It should also promote interagency collaborations across government to support a "Health in All Policies" approach by State leadership. These activities would be combined with the current Ad Hoc Prevention Committee of PHC.

### Conclusion

The current members of the Public Health Council look forward to working with the Department to implement the PHHPC and, in doing so, continue the rich contributions of the new Council's predecessors.

Sincerely,



William F. Streck, MD  
Chair  
Public Health Council  
New York State

[1] "Establishment" is used as a term of art, meaning the process by which an entity is determined to have met the requisite standards of character, competence, standing in the community, and financial soundness to merit becoming a provider of services in the State. It is distinguished from the process of licensure, which is a determination of the DOH, made following a survey process and conditioned upon prior "establishment".

[2] Chapter 730, Laws of 1964

[3] Letter of Deputy Commissioner, DOH to Counsel to the Governor, April 3, 1964, Bill Jacket to Chapter 730, Laws of 1964]

[4] Chapter 617, Laws of 1970, codified in PHL section 2801-a.

[5] Bill Jacket to Chapter 795, Laws of 1965.

[6] One approach to this is to clarify the language "such other matters as deemed pertinent" to bind the Council to state its reasons for decisions, to require that these reasons be based upon the public and not private interests, and to require that the Full Council do the same if it overrides the recommendation of the Establishment Committee.

June 2017

# Analysis of Integrated Delivery Systems and New Provider-Sponsored Health Plans

Allan Baumgarten, LLC



Robert Wood Johnson  
Foundation

Support for this research was provided by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the Foundation.

Many of the earliest and most prominent health insurance companies, such as Kaiser Permanente, Geisinger, and HealthPartners, were formed by provider organizations that under careful care coordination and conservative practice, were able to offer comprehensive benefits from a limited network of providers at competitive prices. Responding to incentives under the Affordable Care Act and other trends in their local markets, health systems in the United States have formed dozens of new health insurance companies or acquired existing health plans since 2010. This project examined the goals of these health systems in entering the health insurance business, and through interviews, data analysis, and case study research, looked at these and other questions: Are the new health plans growing and moving toward profitability? Are they having impact on competition, cost, and quality in their respective markets?

## INTRODUCTION

Since 2010, provider systems established 37 new health insurance companies and acquired five existing health plans. The renewed interest by provider systems in owning their own health plans grew out of longstanding strategies to gain market strength and more control over premium revenues, and in response to payment changes under the Affordable Care Act (ACA) and other market trends.

Some of the provider systems operating new plans are the largest in their respective regions. About half of the new health plans are selling Medicare Advantage products only, while some others saw their best business opportunity as selling to individuals and small groups through exchanges and other channels.

While it is not unusual for a startup health plan to lose money in its first years, only four of the new plans were profitable in 2015. Some reported significant losses, and five have gone out of business. It has generally been a difficult time for health plan startups, as demonstrated by the demise of most of the health insurance cooperatives formed under the ACA and the large losses posted by companies like Oscar and Harken Health. Some of the new provider-

sponsored plans were badly hurt by having to make large contributions to the ACA risk adjustment pools. They had little claims data to demonstrate the health status of their enrollees, while their major competitors had years of detailed data to establish that their enrollees were more expensive to cover.

Among the plans that went out of business was HealthSpan Integrated, the former Kaiser Permanente plan in northeast Ohio. The new owners did not have a good sense of the business opportunity or challenges. They were unable to turn around the plan and its clinics, which had lost \$143 million and 50,000 enrollees in the previous five years. The brand of the new plan was unfamiliar and the clinics were not modern or well located.

Few new plans have gained enough enrollees to achieve economies of scale in plan administration, to gain ability to manage risk, or to have an impact on competition and price in their local markets. As of September 2016, four of these health plans had between 50,000 and 100,000 insured enrollees, and four others had between 25,000 and 50,000. The others were much smaller. Some

are also administering benefits for their own employees on a self-funded basis or for other self-funded employer groups.

For these new health plans to succeed, they must deliver on a value proposition of providing high-quality care at a lower cost.

For these new health plans to succeed, they must deliver on a value proposition of providing high-quality care at a lower cost. Most have not and only a few are making progress in that direction. Many of the provider systems are pursuing their health plan strategy at the same time they are forming clinically integrated networks and Accountable Care Organizations (ACOs). However, it appears most provider systems have not aligned these two strategies. Many new provider-sponsored health plans set their prices lower for group and individual coverage to be competitive in their local markets and to gain market share. However, they do that mostly by paying their own providers below market rates, not by reducing utilization and costs through better care management.



As part of this research, case study analyses were conducted on three of the new health plans: CareConnect, owned by Northwell Health of Long Island, NY (formerly North Shore-LIJ); Innovation Health, a joint venture of Inova Health of northern Virginia and Aetna; and Memorial Hermann Health Plans in Houston. All three are the largest provider systems in their core service areas. CareConnect and Innovation Health (operating under

two licenses) are the biggest of the new cohort of provider-sponsored health plans, while Memorial Hermann (also with two licenses) had less than 35,000 insured enrollees in 2016. None were profitable in 2016, and CareConnect needed to reserve \$120.7 million for payments to the small group risk-adjustment pool.

For the 2017 benefit year, Innovation Health was offered as the lowest cost Silver Plan in its area, but it will not

be offered on Healthcare.gov for the 2018 benefit year. CareConnect had been the low-cost plan in the past, but raised its prices by about 27 percent. Memorial Hermann does not sell on the Healthcare.gov exchange, and its Silver Plans are significantly more expensive than two competitors in 2017. Of the three, CareConnect appears to be the furthest along in aligning its health plan and its other population health strategies.

## OVERVIEW

Beginning with the first Kaiser Permanente health plan in northern California in 1945, provider-sponsored health plans have offered employers and individuals a combination of health care delivery and finance in a single organization. In exchange for a fixed monthly premium, enrollees could have access to comprehensive health care through a panel of employed or contracted physicians and hospitals. The early provider-sponsored health plans offered an implicit tradeoff: in exchange for a lower premium, enrollees would have better coverage, with less cost sharing, but only receive care from a limited network of providers. That was in contrast to the predominant model of insurance at that time, where insurance might cover only 80 percent of the provider's bill, but an enrollee had access to virtually all physicians and hospitals.

Some of the provider-sponsored health plans grew to become highly regarded health insurers, including Kaiser Permanente, which now operates in 10 states; Health Alliance Plan in Michigan, owned by the Henry Ford Health System; HealthPartners in Minnesota; Dean Health Plan, now part of the SSM system in Wisconsin; and the insurance companies of the University of Pittsburgh Medical Center in western Pennsylvania.

Since 2010, provider systems have formed or acquired 42 health plans. That number both overstates and understates the level of new plan activity. On one hand, several of the new companies created two health plans in order to operate in two adjacent states. For example, Catholic Health Initiatives (CHI), the second largest Catholic hospital system in the country, acquired two existing health plans (Soundpath Health in Washington state in 2012 and QualChoice in Arkansas in 2014), and started new Medicare HMOs in five states in January 2015. Alternatively, provider systems created two health plans, one with an HMO license and a second licensed as an accident and health insurer in the same state, because they wanted to offer a variety of benefit plans and thought there were strategic reasons to operate under different state rules. In addition, at least one of the newly licensed health plans (Aultman Health Insuring Corporation) is a reorganized or newly licensed version of an existing health plan. On the other hand, at least six provider-sponsored health plans that were formed since 2010 have failed already, or been sold, and the owners of several others are looking to sell. For example, two hospital systems in Georgia formed a Medicare Advantage health plan and then closed it after two years.

Those provider systems were responding in part to new incentives introduced or emphasized by the ACA. Most of them anticipated that in the future they would be required to accept additional financial risk and be accountable for improving the health of an identified population of patients. They were strengthening their capacity to analyze data on care utilization and cost, while implementing new systems of care coordination. Starting a health plan was a vehicle to apply these new capabilities. The ultimate goal was to attract new patients while generating savings that would drop to the system's bottom line.

This research focused on those new health insurers, looking at their early results, their chances of future success, and their impact on competition, cost, and quality in their local markets. As was noted above, some have already failed, and the analysis also discusses what appears to have gone wrong for them. It also looked at related strategies that these systems were pursuing, including forming ACOs for contracting with Medicare on a limited risk basis (and with Medicaid and commercial payers in some cases), and establishing clinically integrated networks.

## APPROACH TO RESEARCH

Three principal methods were used in this research. First, more than 25 interviews, mostly in-person, were conducted with leaders in provider systems and their sponsored health plans, as well as academics, consultants, and others who have specialized knowledge and a broader perspective on the strategies that provider systems are pursuing and the organizational vehicles they are using. Second, the author and the Robert Wood Johnson Foundation (RWJF) staff assembled and analyzed a data set containing information on about 145 provider-sponsored health plans operating in the United States in 2015 and 2016. The data were mostly drawn from the annual and quarterly statements that health plans submit to their state insurance regulators, following the format of the National Association of Insurance Commissioners (NAIC). The contents of the spreadsheet are described below. Third, case studies were prepared on the experience of these three provider-sponsored health plans:

1. CareConnect, an accident and health insurance company formed by the Northwell Health system (formerly known as North Shore-Long Island Jewish) in Long Island, NY;
2. Innovation Health, a joint venture insurance company and separately licensed HMO owned by Inova Health in Falls Church, VA, and Aetna Health; and
3. Memorial Hermann Health Plan, an HMO and a separately licensed accident and health insurance company opened by the Memorial Hermann system in Houston, TX.

For each case study, three-to-five leaders in the health plan and provider system were interviewed, as well as

other knowledgeable observers of that market. Additional data on enrollment and pricing of those plans and their competitors were gathered and analyzed, including enrollment by line of business and the comparative prices of Silver individual health plans sold on the exchanges in each area.

As noted above, some of the new plans failed in a short time, and additional research was conducted to get a sense of what went wrong for them. This part of the research focused on HealthSpan Integrated, the former Kaiser Permanente plan and clinics in northeast Ohio, which was acquired by the Mercy Health system of Ohio.

## HISTORY OF PROVIDER-SPONSORED HEALTH PLANS

Even before the term health maintenance organization was coined in the 1970s, most of the earliest prepaid health plans were formed by physician clinics and hospitals. Kaiser Permanente got its start as a company clinic to workers in shipyards and steel mills in the 1930s and 1940s and opened to the public in 1945. Doctors and citizens formed Group Health Cooperative in Seattle in 1947. Seventy years later, Group Health Cooperative will become part of Kaiser Permanente. Group Health in Minnesota, now part of the HealthPartners organization, was established in 1957. In the 1960s and 1970s Kaiser Permanente began to expand to places like Colorado and the Mid-Atlantic (Maryland, Virginia and Washington, DC) region. The Henry Ford system in Detroit formed Health Alliance Plan in 1979.

The growth of these health plans coincided with the expansion of employer-sponsored health insurance after World War II and in the 1950s. Those plans, offered through Blue Cross and Blue Shield companies

or life insurers like Prudential and others, allowed employees and their dependents to receive care from the physician or hospital of their choice. The patients would pay the bill and then submit it to the insurer for reimbursement, typically 80 percent of the charges. As employer enrollment in HMOs began to grow in the 1970s, state Blue Cross Blue Shield plans and national insurers like Prudential, Aetna, and CIGNA, responded by adding their own HMOs to offer additional options to employer groups.

Multi-specialty group practices and integrated physician-hospital systems formed new HMOs through the 1980s. Operating their own health plan meant that they had full control over the premium dollar. If they practiced conservatively and delivered care in the most appropriate setting, they could keep the dollars remaining within their systems. In most cases, the providers continued to contract with other health plans and to treat their enrollees and fee-for-service patients. Only a few very large plans, like Kaiser in California, could afford to have a mostly exclusive relationship between their health plan, hospitals, and physicians.

While most provider-sponsored plans began by serving employer groups in their areas, some were responding to the new business opportunities created by the Medicare Risk program (now in its third iteration and called Medicare Advantage) and by the decision of many states to move large numbers of Medicaid recipients into managed care arrangements. Those developments started a new wave of activity by provider systems opening new insurance companies. In states like Illinois and Texas that launched Medicaid managed care initiatives, state medical societies lobbied to include provider-sponsored health plans as contractors. In Illinois, many

soon went out of business after the first attempt by the state to impose mandatory enrollment failed to gain altitude.

Note that many of the new plans are not organized as HMOs but are licensed as accident and health insurance companies, which are regulated differently, depending on the state, from HMOs. One fundamental difference: in most states, an HMO can share risk with provider organizations through capitation contracts, but accident and health insurers may not. In many states, a third statute regulates nonprofit health service plans, usually the remaining nonprofit Blue Cross Blue Shield plans.

## CHARACTERISTICS OF PROVIDER-SPONSORED HEALTH PLANS

The [data](#) on about 140 provider-sponsored health plans that were prepared for this research includes directory information and the date each company commenced business as a health insurer. For each company, the data also include financial information, such as capital and surplus, revenues and net income, use of capitation payments to providers, and enrollment by major lines of business: individual, group, Medicare, and Medicaid. Most of the data are for 2015, with some financial data from 2014 and some enrollment data for the third quarter of 2016. For this part of the analysis, the data are segmented into five periods: health plans formed before 1980; from 1980 to 1989, from 1990 to 1999, from 2000 to 2009, and from 2010 to the present.

Almost all the companies in the data set are licensed in their respective states as HMOs or accident and health insurers. Three Prepaid Health Services Plans (PHSPs) from New

York state are not regulated by the New York Department of Financial Services as either HMOs or accident and health insurers, but are subject to similar financial regulation and reporting requirements overseen by the New York State Department of Health.

California health plans do not file the NAIC statements, but do submit similar reports with financial and enrollment data to their state regulators. There are several California provider organizations that operate under limited Knox-Keene licenses, meaning they can contract with full-service health plans, accepting significant financial risk for the utilization and costs of a defined group of enrollees. (California's statute for licensing pre-paid health plans is known as the Knox-Keene Act.) These limited plans are not full-risk insurance companies and are not included in this analysis. Neither are networks of providers that contract with health insurers to offer a limited network benefit plan, but are not separately licensed by the state. The Vivity health plans in California are an example of that kind of arrangement. A group of seven well known southern California hospital systems, including Cedars-Sinai Health System and UCLA Health, formed Vivity as a limited (or integrated) network plan offered to employer groups in partnership with Anthem Blue Cross of California. The notion is for the provider systems to set their pricing so that the benefit plans can be price competitive with Kaiser Permanente.

*Exhibit 1* summarizes characteristics of provider-sponsored health plans grouped by the decades in which they entered the insurance business. The first cohort, health plans established before 1980, includes the Kaiser Permanente plans in California, Hawaii, Colorado

and the Mid-Atlantic, plus Group Health Cooperative in Seattle, Health Alliance Plan in Michigan, and HealthPartners in Minnesota. Note that Kaiser Permanente of California had \$61.048 billion in revenues in 2015, as much as the next 35 large provider-sponsored health plans. Because Kaiser Permanente of California is so large, it greatly skews the arithmetic averages of the other health plans in its cohort, so medians were used instead. (Note that Kaiser Permanente opened health plans in north Texas, the Albany, NY area, and the Cleveland, OH area in the 1970s and 1980s, which were not successful and were later closed or sold to other operators.)

Only 12 health plans remain from the pre-1980 cohort. The median enrollment in those plans is about 251,000 insured enrollees, and most of them sell in all the major lines of health insurance business: commercial (individual, small, and large employer groups), Medicare Advantage (or Cost) and Medicaid. In 2015, Kaiser Permanente of California had the most enrollees by far, at 8.1 million. Most of the others in the age cohort have between 100,000 and 500,000 enrollees, but two plans have less than 100,000.

Similarly, the median revenue for these 12 health plans was \$1.348 billion. All but two had 2015 revenues above \$1 billion, and four health plans in this group had revenues greater than \$2 billion: the Kaiser Permanente plans in California, Colorado, and the Mid-Atlantic, and Group Health Cooperative of Seattle, which became a Kaiser Permanente health plan in 2016.

The number of health plans in the more recent cohorts is larger, and 29 of the health plans formed by provider systems in the 1980s are still in business. That group includes

the Tufts HMO in Boston, Scott & White Health Plan in central Texas, and six provider-sponsored health plans in Wisconsin. The largest of the Wisconsin plans, measured by premium revenues in 2015, is Dean Health Plan in Madison, with \$1.22 billion in premium revenues. These provider-sponsored health plans were formed during the 1980s, when Wisconsin encouraged HMO formation by offering HMO plans as a health benefit option to state employees across the state and by implementing mandatory HMO enrollment for low-income Medicaid recipients in most of the state.

In 2016, 43 of the provider-sponsored health plans formed in the 1990s are still operating. *Exhibit 2* shows that the median of capital and surplus for health plans launched in the 1990s was \$51.6 million, and eight plans had capital above \$100 million. Most states follow the NAIC Risk-Based Capital standards for setting the minimum level of capital for health insurers. The exhibit also shows that the dollar amount of capitation payments declines steadily as one looks at the health plans from oldest to youngest. The plans formed in the 2000s paid \$128.7 million through capitation contracts in 2014, or 11.8 percent of medical expenses. The oldest plans paid 40.4 percent of their medical expenses through capitation. In 2015, Kaiser Permanente in California spent \$55.055 billion on medical expenses and paid about half of that through capitation to the Permanente Medical Group and other providers.<sup>1</sup>

Many provider systems formed health plans during the Clinton era of the 1990s, when proposals for national health reform envisioned integrated systems of health care and insurance that would compete with each other.<sup>2</sup> Some consultants were advising their hospital clients that the world was moving toward full capitation, and

several hospital systems concluded that the best way to control their destiny was to go a step beyond capitation contracting and launch their own health plans.<sup>3</sup> At the same time, states like Illinois, Michigan, and Texas launched ambitious plans for mandatory Medicaid managed care in large parts of those states. Medical societies lobbied their states to allow provider systems to form health plans, sometimes with lighter regulation than HMOs or health insurance companies, to contract for Medicaid recipients.

While the number of provider-sponsored plans currently operating is about 145, there have been dozens of provider-sponsored health plans that started, but then were sold or closed. In Ohio, there were 13 provider-sponsored health plans in 1998 but that number dropped to six in 2016 and most of them began after 2010. Similarly, Michigan had 13 provider-sponsored health plans in 1998, but only 8 in 2016.

Why did many provider systems, including some regarded as strongly successful, elect to leave the health insurance business? Here are some of the reasons:

1. The difficulty for provider-sponsored health plans, usually operating only in their home region, to compete against national insurance companies. A good example of this is Touchpoint Health Plan in northeastern Wisconsin, which was owned by the ThedaCare system in Appleton and the Beilin Health system in Green Bay. Touchpoint was formed in 1988 and had grown to 140,000 enrollees. It was popular with local employers and patients and received very high marks from National Committee for Quality Assurance (NCQA). However, its owners concluded that a regional health plan could not compete against national companies.

Some of the largest employers in the area had switched from Touchpoint to national insurers that could simplify administration of their benefit plans in multiple locations. The hospitals sold Touchpoint to UnitedHealthcare in 2004, which merged it into its Wisconsin HMO.

2. Hospital owners decided to cash out and use their health plan equity for other purposes. For example, the University of Michigan sold its MCare HMO and MCaid Medicaid HMO to Blue Cross Blue Shield of Michigan and received top dollar for the plans. The University of Michigan had entered the health plan business in 1986, and the two HMOs had grown to 200,000 enrollees before they were sold in 2006. National insurers like UnitedHealthcare were reportedly making offers to MCare, and Blue Cross Blue Shield was willing to pay a high price to keep UnitedHealthcare from gaining a stronger position in the market. The hospital system can use the proceeds to finance acquisitions of other hospitals or clinics, or invest in health information technology.
3. Sometimes the business opportunity doesn't fully materialize. When Illinois implemented its first attempt to enroll large numbers of Medicaid recipients in managed care in 1997, the University of Chicago health system formed a prepaid health plan (not a full-risk HMO) called Family First to contract with the state, as did several other provider systems. The University of Chicago made investments anticipating that the Medicaid health plan could grow to 25,000 enrollees in a few years. Instead, enrollment in Medicaid managed care did not take off as planned, and Family First gained less than

3,000 enrollees. The University of Chicago closed the plan within a few years and sold the enrollees to another health plan.

4. Sometimes the health plan's managers and the health system's physicians and administrators are at odds and can't get on the same page. In 1994, Allina Health system in Minnesota was formed by the merger of the HealthSpan hospital system and the Medica HMO. Allina physicians expected better payments from the health plan and that the health plan would steer patients to Allina hospitals and physicians. But the health plan managers would not pay more because that would make the health plan uncompetitive with the other local health plans, and it continued to contract with other provider systems because it marketed the health plan as a broad network, consumer choice model. An activist attorney general forced the breakup of the combined provider system and health plan in 2001, citing concerns about excessive market power. Even without his intervention, it is likely that the organization would have split within a few years. Conflicts between the health plan and care delivery sides of the organization were also cited as a reason for University Hospital system in Cleveland to sell its QualChoice health plan in 2006 to Anthem, Inc. for what was a very good price.
5. For one national hospital company, Tenet Health, operating health plans is no longer considered a promising business strategy. As part of its acquisition of Vanguard Health Systems in 2013, Tenet acquired

Vanguard's health plans and Medicare ACOs in Arizona, California, Illinois, Michigan, and Texas, with about 139,000 total enrollees. It sold Harbor Health Plan in Detroit in October 2016 and plans to sell its Texas and Arizona health plans in 2017. A Tenet executive explained, "The health plans business we acquired with Vanguard [Health Systems] is not a core element of our capabilities in value-based care. It's subscale and not profitable in aggregate, and it requires capital. So, we are exiting it."<sup>4</sup> Tenet is also selling its hospitals in non-core markets and home health agencies.

McLaren Health in Michigan is an example of a provider-sponsored health plan that has been successful. It was formed in 1999 when Michigan expanded Medicaid managed care to counties outside the Detroit area. Since then it has added other lines of business and expanded into most counties in the state. At the end of 2015, it had about 204,000 enrollees. McLaren health plan and hospital executives alike agree that a provider-sponsored health plan must be empowered to execute its business plan, even when that means not favoring the provider owners in pricing or including competing provider organizations in its network. Several other interviewees for this research made the same point.

Sometimes what goes around comes around. There is at least one example of a provider system that had its own health plan in the 1990s, sold it, and then re-entered the business in the past five years. The Memorial Hermann system in Houston owned a health plan in partnership with a Catholic hospital system, but sold it to Humana in 1999.

## NEW PROVIDER-SPONSORED HEALTH PLANS

*Exhibit 3* provides an overview of 37 provider-sponsored health plans that commenced their operations since 2010. The health plans are sorted by state, in alphabetical order. Below that table is comparable information about five health plans that were established before 2010, but have been acquired by provider systems since.

Much of the new health plan activity has come from a few provider systems. For example, CHI, the third largest nonprofit health system in the country, established seven of the new health plans and acquired existing plans in Washington state and Arkansas. The new CHI health plans are in markets where CHI has member hospitals. Most of them are Medicare Advantage HMOs with fewer than 1,500 lives as of the third quarter of 2016. For example, CHI's RiverLink Health Plan in Ohio is a Medicare Advantage plan, whose provider network is built around the Tri-Health hospitals and physicians. CHI is a co-sponsor of Tri-Health along with Bethesda, Inc., a Protestant health organization. RiverLink in Ohio grew to 443 seniors at the end of 2015; 1,129 as of the third quarter of 2016; and about 1,170 as of January 1, 2017. CHI also established RiverLink of Kentucky, built around the CHI providers in Louisville and Lexington. In May 2017, CHI announced that it would seek buyers for its Louisville hospitals, including Jewish Hospital. That plan had 1,023 seniors on January 1, 2017. In Arkansas, CHI acquired QualChoice Life and Health Insurance Company, plan with more than 10,000 lives and added QualChoice Advantage, a Medicare Advantage plan, at the beginning of 2015.

CHI, which is in merger talks with Dignity Health, another major nonprofit hospital system, announced in 2016 its intent to withdraw from some or all its insurance ventures. It was reported that CHI lost \$106.9 million in 2016 on its insurance operations.<sup>5</sup> In Nebraska, where CHI opened HeartlandPlains Health Plan, the new health plan faced pushback from Blue Cross Blue Shield of Nebraska, the dominant local insurer. For several months, the local CHI providers were excluded from the Blue Cross Blue Shield network, reducing their revenues.

In other cases, existing health plans added a new health plan, such as adding an accident and health insurance company alongside their HMO or adding a new license in a neighboring state. For example, Gundersen Health Plan in LaCrosse, Wisconsin, added a Minnesota HMO license in 2014.<sup>6</sup> UPMC Health Plan in Pittsburgh added UPMC Health Coverage to offer more group plan options, and Sentara Health of Virginia added a North Carolina insurance company license to expand its presence there. Memorial Hermann Health Plan started by acquiring the dormant UniCare health insurance license in Texas from Anthem, and then added a second license in 2013, so it could offer both PPO and HMO plans.

Some provider systems added insurance companies to capitalize on a specific business opportunity in their area or to fill a gap. For example, Christus Health of Texas added an HMO currently focused on products for individuals; Northwell Health in New York sought to capitalize on the new opportunity to sell to individuals and small groups through New York's insurance exchange, New York State of Health; and Johns Hopkins Health added a Medicare Advantage health plan to its Medicaid health company.

*Exhibit 4* shows total enrollment in the new health plans in 2014 and 2015 and enrollment by major lines of business as of September 30, 2016. Most of the new health plans had less than 10,000 enrollees as of September 2016. Four of them had 50,000 enrollees or more: Health First Insurance in Florida, CareConnect in New York, Innovation Health Insurance in Virginia, and Network Health Insurance Corporation in Wisconsin.

Some of the new health plans are joint ventures between provider systems and health insurers. One example is Innovation Health in northern Virginia, a partnership of Aetna Health and the Inova Health System. (Aetna's joint ventures are discussed in more detail below.) The Moses Cone health system in Greensboro, NC, partnered with Care N' Care Insurance of Texas to form a Medicare Advantage health plan called HealthTeam Advantage, and Anthem, Inc. and the Aurora system in Wisconsin have formed a new insurance company focused on employer groups. In New England, Tufts Health Plan formed a joint venture health plan with a group of hospital systems in New Hampshire.

A variation on the joint venture model can be found in the growth of two consulting firms that work with provider systems on health plan strategies and population health initiatives. Evolent Health, based in Arlington, VA, was formed by UPMC Health Plans and the Advisory Board in 2011. Evolent Health supports provider systems with plan administrative services, software, and data for population health management, and consults with provider systems that want to operate their own health plans. When it made its public offering in 2015, the company identified seven key partnerships where it was providing core management services to new or

established health plans owned by provider systems. Examples include Passport Health, a Medicaid plan in Kentucky and Piedmont-WellStar Health Plan, a Medicare Advantage plan in the Atlanta area that closed at the end of 2015. The technology for plan administration is based on what UPMC Health Plans has developed. The initial public offering in 2015 established the value of the company at more than \$1 billion. In the fall of 2016, Evolent acquired Valence Health, another consulting firm, based in Chicago that works with providers seeking to move toward value-based contracting and a health plan strategy. In the past few months, Evolent has announced new partnerships with Orlando Health in Florida, Carilion Clinic in Virginia, and Banner Health Network in Arizona.

*Exhibit 5* shows financial results for the new health plans in 2015. Only a handful of the plans posted positive net income in 2015, with UPMC Health Coverage having the best results. A few plans posted very large losses, including Land of Lincoln Health, a cooperative formed under the ACA, which has since gone out of business, and HealthSpan Integrated, the former Kaiser plan in northeast Ohio, which has also closed its doors. Land of Lincoln posted a loss of \$90.8 million in 2015, and HealthSpan Integrated lost \$217.6 million.

## HEALTH PLAN FORMATION STRATEGIES

Why the renewed interest by provider systems in entering the health insurance business? For the most part, the reasons have not changed in the past 40 years. First, provider systems want more control over premium dollars, sometimes described as getting to the "top of the health care food chain." The CEO of a provider-sponsored health plan noted that as health plans get larger and

exert more market power, providers are at risk of being reduced to price takers at the bottom of the food chain. Even when provider systems have full capitation contracts, they typically receive 80 percent or less of the premium dollar and the health plan keeps the rest for marketing, overhead, and profit. Second, at a time when inpatient volume is flat or even declining in some local markets, some provider systems see operating an insurance plan as a way of gaining additional patients and the revenues that accompany them.

Put another way, some provider systems start a health plan as a defensive move because they are losing patients to other provider systems. For example, Vivity Health was formed by Los Angeles area hospital systems working with Anthem Blue Cross because they were losing patients to Kaiser Permanente. Similarly, the Sutter health system in northern California was also losing patients and decided to start its own health plan. Third, they see business opportunities in certain lines of business, especially Medicare Advantage. As of September 2016, 22 of the 41 provider-sponsored health plans listed in *Exhibit 4* are operating Medicare health plans, and Medicare is the primary or only line of business for 17 of them.

Another explanation frequently cited is that patients and employers like doctors and hospitals more than insurers, and hold them in higher regard. Establishing a provider-sponsored health plan is way of leveraging that regard. For example, will a plan enrollee prefer to receive health advice from a nurse employed by a local provider versus a nurse in a remote location calling from a national insurance company? Some are skeptical that those preferences would influence the purchasing decision of an employer or an individual.

At least four important factors have changed. First, providers cited the enactment of the ACA in 2010 as a reason for launching a health plan. Specifically, the law introduced a series of initiatives to change provider payment methods and to refocus attention on what is broadly called population health. The ACA created incentives for health systems to focus on improving the health of a defined population of patients and delivering care more efficiently. In other words, payers like Medicare are moving to payment methods that reward *value* instead of *volume*. This is most clearly seen in the changes made and initiatives launched for Medicare, such as bundled payments and the different kinds of ACOs. The ACO concept is simple: a provider organization contracts with Medicare to provide comprehensive care to a defined population of seniors. If that is done at less cost than in the previous year while meeting quality benchmarks, the ACO and its participating providers will share in those savings. Note that the bar keeps rising. As an ACO is successful in reducing costs, the spending benchmark for the next year is also reduced.

Successful ACOs built up their capabilities to assemble and analyze data on their patients to identify those using large amounts of care and to implement care management practices and systems to reduce the cost of care provided.<sup>7</sup> One example is reducing unnecessary readmissions, emergency room visits, and use of post-acute care through better discharge planning and follow-up. Using those same capabilities and practices, some provider systems have sought to scale up and take most or all the utilization risk for those patients by operating an insurance plan. If they are successful, they keep all the savings generated, not just a share.

The second change cited by several interviewees is the availability of robust data sets detailing the utilization and cost of care, and powerful tools to analyze the data. Information systems, including electronic medical records, that are now in wide use, enable provider systems to analyze utilization patterns and identify high utilizers of care and gaps in care management. A former executive at Evolent Health gave as an example the potential of using data for risk stratification in order to identify patients who need the most support and attention.<sup>8</sup>

Third, Medicare, which is usually the payer for 30-40 percent of a system's patients, has changed. In the past, Medicare was generally paying providers on a fee-for-service basis, so there was no incentive to manage utilization. Today, Medicare is a leader pushing providers to move toward value-based payment and care delivery. CMS has announced a goal of 50 percent of Medicare payments being tied to quality by 2018. The enactment of MACRA in 2015 (the Medicare Access and CHIP Reauthorization Act) creates important financial incentives to move to payment methods that reward quality.

The fourth change is more of an updated version of a popular strategy from the 1990s. Provider systems formed a variety of networks, known by names such as physician-hospital organizations, independent practice associations, and group practices without walls. The notion was that competing providers, retaining separate ownership and governance, could form partnerships for care delivery. Those partnerships, in turn, would contract with health plans or perhaps with large self-funded employers. While a few of those succeeded, most never demonstrated that they could provide significant additional value to insurers or employers.

In this decade, similar partnerships are referred to as Clinically Integrated Networks (CINs).<sup>9</sup> Many hospital systems, including the three analyzed in the case studies that follow, have established CINs. A CIN can negotiate contracts on behalf of providers that are otherwise competitors. In order to pass muster with the Federal Trade Commission (FTC), participating providers must agree to accept evidence-based practice guidelines, must participate in development and enforcement of the guidelines, and must invest in the time and information technology, including electronic medical records, needed to operate as an integrated network.

Just as in the 1990s, the question is whether these new CINs can demonstrate significant added value. In Wisconsin, most of the hospital systems joined one of two large CINs. The Ascension hospitals, one of the two largest systems in the state, joined together with the Froedtert/Medical College of Wisconsin and other systems to form Integrated Health Network of Wisconsin. The Aurora system, the other largest system, joined together with the University of Wisconsin Health system, Gundersen in LaCrosse, Beilin in Green Bay, and ThedaCare in Appleton to form a CIN called AboutHealth.

Both CINs built up an infrastructure of staff with population health expertise and data systems, and both succeeded in getting some contracts with payers. However, it appears that neither one could get enough new contracts and revenues to support the new infrastructure. In September 2016, Integrated Health Network laid off about 40 percent of its staff, saying that it was transferring those duties to the member systems. A few months later, University of Wisconsin Health dropped out of AboutHealth.

There are four basic approaches for a provider system to take when it seeks to enter the insurance business:

1. **Build:** A provider system, possibly partnering with other providers, builds a new health plan from the ground up or by renting pieces of the machinery. This is the most common approach for the current cohort of new health plans. Examples include Northwell CareConnect and the two Crystal Run health plans, all in New York.
2. **Buy:** A provider system acquires an existing health plan. Examples include the Tenet/Detroit Medical Center hospitals acquiring a Medicaid HMO called ProCare in 2014 and renaming it Harbor Health Plan in Michigan and the Mercy Health system in Ohio buying the Kaiser Permanente health plan and clinics in the Cleveland-Akron area and creating HealthSpan Integrated. (Tenet has since sold Harbor Health Plan, and Mercy Health closed HealthSpan Integrated.)
3. **Partner:** A provider system and a health insurer form a joint venture health plan, with the health plan supplying most of the administrative services needed. Innovation Health in Virginia, a partnership of Aetna Health and the Inova Health system, is an example of this.
4. **Evolve:** A provider system that operates a successful Medicare ACO or a rental-preferred provider network uses that experience and those assets to start a health insurance company. Memorial Hermann Health Plan and Health Insurance Company in Houston can be viewed as an example of this approach. A few years ago, QualCare, a preferred-provider network owned by

hospital systems in New Jersey, did the groundwork to create a new Medicare Advantage health plan – but stopped short. CIGNA acquired QualCare in 2015.

What is necessary for a new provider-sponsored health plan to succeed? The CEO of a major provider-sponsored health plan in western Pennsylvania summarized it this way: “To be successful, a provider-sponsored health plan has to create a value proposition that includes better quality care and a more affordable network of providers. Going forward it must maintain that added value. A hospital system that operates a health plan only to bring more patients to its hospitals won’t be sustained.”<sup>10</sup>

A consultant to provider systems echoed the need to demonstrate the value of integrating care delivery and insurance. “A provider system’s brand name will not add much to sales of an insurance plan unless it is accompanied by the demonstrated ability to manage clinical care more effectively.”<sup>11</sup> He also noted the importance of engaging physicians in the new health plan and giving them opportunities to earn more through population health initiatives. Some of the new health plans start by paying physicians below market rates, creating internal conflicts and obstacles to success.

Another observer of health plan and provider markets suggested that effective care delivery organizations can enjoy the benefits of owning a health plan without assuming the risk or making the necessary investment. “The risk of owning a health plan is significant. If a provider system can deliver great care while saving money, does it need to start a health plan? Why not continue to provide efficient, high-value care for multiple payers and enjoy strong margins?”<sup>12</sup>



To launch a successful health plan, a health system needs a large population base and annual revenues. One consultant suggested that a local population of at least one million is needed and that the hospital system should have \$1-2 billion in revenue.<sup>13</sup> He further suggested that provider systems should move carefully into assuming both upside and downside risk, perhaps beginning by gaining experience through some of the Medicare ACO models. Finally, he cautioned that some provider systems invest in building a large infrastructure, but don't have sufficient enrollment over which to spread those expenses. For that reason, and others, partnering with an existing health plan and using its infrastructure may be a more promising approach.

In order to reach a size that enables a health plan to gain economies of scale and to better manage risk, many health systems will move administration of their employee health plans into the new insurance company. A few bought contracts or blocks of enrollees to jumpstart their growth. In 2016, the Memorial Hermann Health Plan in Houston bought about 14,000 Medicaid managed care enrollees from Molina Healthcare, which will take place in 2017.

One of the factors that seems to motivate provider systems is whether the major payers in the area are open to value-based contracting, including accountable care/shared savings programs, primary care medical homes, and payments to providers to use technology and care processes to make patient care more efficient. One consultant leader observed that independent Blue Cross plans in many states seem less inclined to engage in value-based contracting with provider systems, so there are more examples of those provider systems pursuing their own health plan strategy.<sup>14</sup> At the beginning

of 2017, Aetna Health announced that it would form four joint venture health plans with provider systems. The first was Innovation Health in northern Virginia, which has been in operation since 2013. Since then Aetna has announced that it will form joint venture health plans with Texas Health Resources, the largest hospital system in the Dallas-Fort Worth area, Banner Health, the largest system in Arizona, and Allina Health, the largest hospital system in the Twin Cities. In each state, an independent Blue Cross plan is the number one or two insurer in the area.

## DESIGN ISSUES AND CASE STUDIES

This section presents results from three new provider-sponsored health plan case studies. The interviews and background research on these health plans focused on a series of issues needing to be addressed in putting up a new health plan.

1. What is the business opportunity and which lines of business should the new plan enter? Can a health system leverage its public image as a trusted provider by starting an insurance company?
2. What is the best way to put together the infrastructure needed to operate the health plan?
3. Where will the initial capital come from and how is governance of the new organization structured? Does the system have a realistic view of how much capital will be needed to sustain the plan for early years of losses?
4. Will the new health plan administer benefits for employees of the health system? What are other ways of seeking to get to scale?
5. How will the new health plan price its products, particularly for individual and group plans? Is

that pricing based on discounts granted by the provider owners or by savings generated from reduced utilization and better quality?

6. Is the health plan strategy aligned with related health system initiatives, such as forming a clinically integrated network and contracting with Medicare as a shared savings ACO?
7. What are the specific challenges that face new provider-sponsored plans as well as any health insurance startup in the current environment?
8. What impact has the new plan had on competition and price in its local market?

In the case studies that follow, data on the revenues and net income, and the impact of the ACA risk-mitigation programs are compiled from NAIC annual statements.

### Building a Health Plan: Northwell CareConnect

CareConnect was formed in 2013 by the North Shore-LIJ (Long Island Jewish) health system, now known as Northwell Health, and its first enrollees joined in 2014. Northwell is the largest provider system in New York state, with 21 hospitals, mostly on Long Island, but also in New York City and Westchester County. In 2015, it had operating revenues of \$8.722 billion.

The system is the largest provider in much of Long Island and in parts of Queens. As such, it is seen as an essential provider by most health plans and commands high fee-for-service payments. Northwell already had significant managed care experience, both as a provider system and as a plan sponsor. It is one of the sponsor hospitals of HealthFirst, which is primarily a Medicaid and Medicare Advantage health plan. HealthFirst is the fifth largest health plan company

in New York, with 2014 revenues of \$5.93 billion. Before starting CareConnect, Northwell developed a joint product with UnitedHealthcare in New York based on a first-tier network of Northwell facilities and providers, but got only a handful of enrollees. That experience soured Northwell on the possibility of a joint venture health plan.

Besides creating CareConnect, the health system has pursued other growth strategies. It expanded its presence in Manhattan when it acquired Lenox Hill Hospital in 2010. In 2014, North Shore-LIJ acquired Phelps Memorial Hospital and Northern Westchester Hospital, both in Westchester County. Since then, it established a free-standing emergency department at the former St. Vincent's hospital site in Lower Manhattan. It is known as Lenox Health Greenwich Village, linking the center both in branding and in referrals, and transfers to Lenox Hill Hospital. In another strategy to expand its geographic presence and build up referrals, Northwell formed a partnership with GoHealth Urgent Care clinics. That chain currently has 34 clinics in the five boroughs and Long Island. GoHealth has similar partnerships with local hospital systems in its other major markets in Portland, OR and northern California.

Implementation of the New York health insurance exchange, along with the mandates and subsidies for coverage, created an opportunity for new health plan entrants. Two other health plans started at the same time in New York as CareConnect: the Health Republic cooperative and Oscar Health Insurance. Northwell decided to begin with commercial products for individuals and groups, having concluded that both the Medicaid managed care and Medicare Advantage markets were already too crowded to enter. Census estimates

for 2015 show about 227,350 seniors in Nassau County. About 58,300 of them, or 25.6 percent, were enrolled in a Medicare Advantage plan in January 2017, which is not a high penetration rate.

In 2013, the health plan was formed with \$25.7 million of capital. Many leaders of CareConnect come from the health plan world, with the CEO coming from UnitedHealthcare and Empire Blue Cross Blue Shield. To establish the health plan, Northwell built some administrative functions and contracted for others. Certain core functions involving customer contact, such as call centers, were built in-house. Other functions, like premium collection, were contracted out. Like other health plan startups, CareConnect's administrative expenses are relatively high. In the first nine months of 2016, CareConnect spent \$60.8 million for plan administration expenses, which is 23 percent of premium revenues and \$72.72 per member per month.

In 2014, CareConnect gained 11,662 enrollees and grew to 69,374 at the end of 2015. By the third quarter, enrollment reached 100,000, with 70,500 in small group plans and the rest in individual plans. As many as 30,000 of the enrollees came to CareConnect from Health Republic, the insurance cooperative in New York that flamed and crashed toward the end of 2015. Northwell was not a contracted provider to Health Republic, so its losses were mostly for emergency department visits and were less than some other providers when state regulators shut down the failed insurance cooperative.

CareConnect did not begin, as many provider-sponsored plans do, by enrolling hospital employees into the new health plan. Only in the past year did Northwell offer CareConnect as a plan option for system employees.

Almost all the system's employees remain in a self-funded plan for which UnitedHealthcare provides administrative services.

Few new health plans are profitable in their first years, and that was the case for CareConnect. It lost \$31.8 million in 2015 and \$27.2 million in 2014. Health plan executives say that the health plan is on track to show an operating surplus, except for a huge obstacle in the road. The ACA created a three-part mechanism to mitigate losses for insurers that took a chance on entering or expanding their individual and small group business. The "3 Rs"—reinsurance, risk adjustment, and risk corridors—were designed to protect insurers who enrolled a population that was sicker than average and consumed more care than was budgeted. In concept, those insurers with sicker enrollees would get payments, while other insurers that enrolled a healthier population, one that was below average in its care utilization, would contribute to those pools.

Based on the risk profile of the CareConnect enrollees in 2015 and how that compared to other health insurers in the state, the largest of which is Oxford Health, CareConnect paid \$13.3 million to the small group market risk-adjustment pool. Oxford Health received payments of \$315.4 million. A reporter for *Modern Healthcare* summarized the issue this way: "Some insurers argue that the risk-adjustment formula favors bigger payers with more claims experience. . . . Small companies have said they don't have as much claims data, and therefore their membership base looks healthier than it is."

Based on its small group enrollees and operations in the first three quarters of 2016, CareConnect recorded a reduction to premium revenue of \$89 million to be paid to

the risk-adjustment pool for New York. Without that liability, the company would have come close to breaking even on operations in 2016. (It showed a loss of \$93.8 million for the first three quarters. Its annual statement for 2016, filed on March 1, 2017, showed a loss of \$157.5 million. Of that amount, \$110.8 million was in small group business and \$42.4 million was from individual business. It also showed that CareConnect had recorded a liability of \$120.7 million for the risk-adjustment program, subject to change as new information becomes available.)

Most of the money that CareConnect contributes to those pools is likely to go to the Oxford Health Plans, a UnitedHealth Group company. Note that Oxford Health Insurance, one of four UnitedHealth Group health plans operating in New York, had operating income in the first three quarters of 2016 of \$376.2 million on revenues of \$3.924 billion. It has a very large share of the small group market, and the average risk factor for its enrollees is very high. Besides the obvious pain of paying so much to the risk-adjustment pool, Northwell had to contribute \$80 million in additional capital during 2016 to comply with state solvency requirements. Those dollars diverted to the health plan are not available at budget time when hospital administrators and different divisions of the health system compete for increased budgets for staff or spending on other initiatives. That is the kind of challenge that raises questions in other units of the health system about the wisdom of pursuing a health plan strategy.

The ACA risk-adjustment program functions as a zero-sum game. For every dollar benefiting a health plan, another health plan must give up a dollar. There may be a silver lining to the risk-adjustment cloud, at

least for 2017. The New York State Department of Financial Services adopted an emergency regulation in September 2016 that authorizes the Superintendent of Financial Services to create a “market stabilization pool” if she determines that the transfers of funds under the ACA risk-adjustment mechanism for small group plans would adversely affect the stability of the small group market in the state. The stability fund would capture some of the money received by health plans under the ACA risk adjustment and distribute back to health plans that paid in and were adversely impacted. Some observers suggested that CareConnect would have sharply reduced its presence in that market in 2017 if it did not obtain relief from the state.

What impact has CareConnect had so far? In Nassau County in 2017, CareConnect competes against five other health plans selling individual coverage on the New York State of Health exchange. Based on a single male, age 40, *Exhibit 6* compares the monthly premium and the annual deductible of the lowest priced Silver Plan offered by each of those companies for the 2017 and 2016 benefit years. In 2016, CareConnect’s EPO (Exclusive Provider Organization, meaning no out-of-network benefits) plan was the lowest price Silver Plan in Nassau County, followed closely by Fidelis Care. However, CareConnect increased its premiums by about \$100 a month for 2017, and it is now roughly in the middle of the price range. It increased its premiums for small groups by 23 percent, much of which was needed to cover the anticipated transfer of risk-adjustment dollars. Fidelis Care, which increased its monthly premium for individuals by about \$51 and HealthFirst, which increased its premium by only about \$31, are now less expensive than CareConnect in Nassau County.

CareConnect executives said they believe that their small group option is the most affordable in the market and that its individual plans are the most affordable of the commercial plans that include Northwell providers in their network. Fidelis Care and HealthFirst both include Northwell hospitals in their provider networks, but are primarily Medicaid plans.

Has CareConnect affected competition in the New York area? According to a leader of employer purchasers, the Greater New York area is an area with good competition by health plans selling to employers. The four large companies are sometimes referred to as BUCA or CUBA: Blue Cross, UnitedHealthcare/Oxford, CIGNA, and Aetna. National employers are primarily working with those four companies, often as administrators for their self-funded group plans.

Local observers that were interviewed representing employer purchasers and hospitals commented that Northwell providers are well-regarded, and the system is seen as investing in the analytics and other capabilities needed to make the transition to population health management. Other New York systems are viewed as not investing, and still dependent on fee-for-service payments.<sup>16</sup>

Those observers welcomed the new competition that CareConnect and the other startups bring to the local health plan market. Still, one questioned whether the commercial market was the right place to start, compared to Medicare Advantage, for example. A commercial population generally commands a lower monthly premium and there are fewer opportunities to save money. That is, fewer commercial enrollees have chronic conditions or are experiencing avoidable hospitalizations. Commercial plans

often pay more to specialists, and there may be opportunities to reduce spending there – but at the possible consequence of alienating those specialists.

Has CareConnect gained significant market share? Enrollment in CareConnect was 100,000 as of the third quarter of 2016, with about 70 percent of that in three counties: in Nassau and Suffolk counties on Long Island, and Westchester, north of New York City. (Enrollment reached 112,000 at the end of 2016, with much of the growth coming from large employer groups.) About 65,000 enrollees were in small group plans, and about 29,300 were in individual plans. Almost all the small group business was sold outside of the exchange while about 40 percent of the individuals bought coverage on the public exchange. Note that, according to CareConnect leaders, the health plan mostly sells Platinum and Gold plans, so that would mean that a lower than average proportion of enrollees received subsidies to buy their coverage.

Based on New York supplements to health plan statements for the third quarter of 2016, there were about 84,500 enrollees in individual plans (called Direct Pay in New York) in those counties, and CareConnect had 27 percent of them. Empire Blue Cross Blue Shield has 30 percent and Oscar had 28 percent. The number of individuals with insurance coverage in those counties grew from about 16,600 in 2012, before implementation of the ACA.<sup>17</sup> Most of those individuals were covered by Empire Blue Cross Blue Shield.

Enrollment in small group plans in those counties has decreased since 2012, from 304,800 to 219,000. Still, the UnitedHealthcare companies (including Oxford Health) continue to dominate that market. CareConnect had 21.1 percent of the small group

enrollees in those counties in 2016, while UnitedHealthcare/Oxford had 90 percent in 2012 and 76.7 percent in 2016.

Has the health plan strategy helped to move the Northwell system to a greater focus on population health? As Northwell was establishing the health plan, it also created Northwell Health Solutions as a center for analyzing data on care quality and cost, and for launching initiatives to improve care management. In 2015, Northwell was approved to begin a Medicare Shared Savings Program ACO in January 2016. It is one of 100 new Medicare Shared Savings Plan ACOs that started their participation in 2016. It had already participated as a provider in a Pioneer ACO with Montefiore Medical Center in the Bronx. In addition, it has entered ACO-like arrangements with commercial and Medicare Advantage payers, including Empire Blue Cross and Blue Shield and Humana.

Northwell Health Solutions formed a clinically integrated network comprised of Northwell employed physicians plus other affiliated practices to offer to payers like Aetna and HealthFirst. Like other hospital systems it is analyzing its protocols for care coordination and follow-up after discharge, as well as practices within the hospital. Some of its hospitals, including North Shore University in Manhasset, were subject to the Medicare 1 percent penalty for an excessive rate of hospital-acquired conditions. North Shore and other hospitals in the system were also penalized for a high rate of readmissions for certain admission categories, such as pneumonia and heart failure. It launched several initiatives to reduce emergency department use and to improve transitions of care, as well as sharing information with physicians about their performance. It is assembling those

improved capabilities as part of a move to value-based contracting with key payers, while also applying those improved capabilities to CareConnect enrollees.

In a recent step toward aligning those population health initiatives with CareConnect, the health plan named the head of Northwell Quality Solutions as its Chief Medical Officer. Still, it would be correct to say that in its first years, CareConnect was able to offer competitive pricing for its health plans by reducing payments to Northwell physicians and facilities. (Health plan leaders said that CareConnect pays community physicians more than its key competitors.) As it moves into its next stage of development, it hopes to achieve the kind of clinical integration that will lead to higher quality and lower costs.

Health plan leaders said they had not detected any significant pushback from health plans who might be upset that Northwell was now in competition with them. While the health plan has grown, its numbers are still relatively small in the region. Further, the Northwell system is seen by many employers as a “must-have” provider, which would make it difficult for a health plan to exclude Northwell from its network. Finally, Northwell hopes that other health plans will appreciate the value of the capabilities it is building for care management and population health.

## Joint Venture Strategy: Innovation Health

Inova Health is the largest hospital system in Fairfax and Loudon Counties in the northern Virginia suburbs of Washington, DC. In 2015, the system had operating revenues of \$2.972 billion. It is in a very well-educated and affluent area, with median household income of \$113,208 in Fairfax County in 2015. Penetration by Medicare Advantage

plans is low here. About 125,600 people (11% of the population) in Fairfax County are 65 and older and less than 15 percent of them are in Medicare Advantage plans.

The system includes five general acute care hospitals, a pediatric specialty hospital, freestanding emergency departments, urgent care clinics, ambulatory surgical centers, and more than 400 employed physicians practicing in dozens of sites around the region. The system grew through mergers, acquisitions, and construction of new facilities. In 2008, Inova sought to merge with the Prince William Health System, which has a large hospital in Manassas, but withdrew in the face of a challenge from the FTC. Prince William affiliated a year later with the Novant Health system of North Carolina. There is no public hospital in these counties, so the Inova system provides much of the indigent care in the area and operates specialized clinics for persons with HIV/AIDS. It also has launched the Inova Center for Personalized Health, focusing on genomic and translational medicine, and has partnerships with the University of Virginia for research and education.

One Inova Health executive described the region as of one the most lucrative fee-for-service regions in the country. Inova Health's largest commercial payer is CareFirst, the Blue Cross Blue Shield plan for northern Virginia, DC, and Maryland. And because the Inova system is considered by many employers and others to be a "must-have" provider, it commands high fee-for-service payments. The Inova system had been a major provider to Kaiser Permanente, one of the largest health plans in the region, with more than a half million enrollees. However, the two ended their contracts in 2013, and Kaiser Permanente uses two other hospitals in northern Virginia.

Inova Health concluded that the current fee-for-service environment was not sustainable, particularly as key elements of the ACA were implemented. It expected that more care would be delivered outside of its acute care hospitals and a greater percentage of revenues would come from performance-based contracts.

To make the transition to an organization focused on population health, Inova Health determined that it should re-enter the health plan business. (In 1997, Inova Health bought the Virginia HMO of Principal Insurance, ran it for a few years, and then closed it.) Rather than attempting to build a new health plan, it decided to either buy a health plan or form a partnership with an existing insurer. If the health plan could grow to half a million lives, Inova Health expected it would lose some of its lucrative fee-for-service business. But it would also grab market share from other local hospitals and would have control over 100 percent of the premium.

Based on responses to a Request for Information, Inova selected Aetna as its partner in forming a joint venture insurance company. The new insurance company, named Innovation Health, was Aetna's first venture into establishing a new health insurance company with a provider system. As noted earlier, Aetna has also developed partnerships with provider systems that can be described as private label products. Aetna supplies the insurance license and the administrative systems, and the products are limited network plans based on the partner health system's care delivery network. For example, Aetna has a private label arrangement with Carilion Clinic, a five-hospital system in the Roanoke, VA area.

In both models, the emphasis is leveraging the positive image of the provider system in the local market. There is a general sense that people

relate more positively to their medical provider than to their health insurance company. Aetna is not named and remains somewhat in the background.

Innovation Health was not the first venture by the Inova system in the insurance business. Its venture into health plan operation in the late 1990s was not successful. In 2012, Inova Health acquired a Medicaid health plan, now called INTotal Health, from Anthem, Inc. (Anthem was required to divest some of its holdings in Virginia as part of its acquisition of Amerigroup, a Medicaid company.) INTotal had about 58,400 Medicaid enrollees at the end of 2015.

This process of designing what became Innovation Health occurred at the same time as Inova Health's acquisition of the Amerigroup Medicaid HMO, but the company did not consider using that health plan as a vehicle for commercial and Medicare products. Based on interviews with Inova Health leadership, the Medicaid health plan continues to operate separately from the commercial plans.

Innovation Health operates under two licenses in Virginia: Innovation Health Plan for HMO plans and Innovation Health Insurance for PPO products. The governing board is made up of four members appointed by Aetna and four appointed by Inova Health. Aetna Insurance provides almost all administrative services to the health plans. Several of the key health plan executives moved over from Aetna. Each partner contributed capital to create the new company and then, as enrollment grew, added more capital to meet solvency requirements. Under a management services agreement, Aetna Health Management (AHM) provides a range of plan administration services to the health plans. Innovation Health Insurance incurred costs of \$40.0 million to AHM in 2015 for plan

administration services and \$26.3 million in 2014. Innovation Health has its own sales and marketing staff and works through local brokers and agents. As the health plan grows, some of the administrative functions may move in-house. Aetna manages the data on utilization and costs and it also supplies care management for enrollees served by providers outside of Inova Health.

When Innovation Health prepared to launch, Aetna offered its employer customers in the area the chance to move to the new company, to stay with Aetna, or to select a different plan. Many did switch to Innovation Health, including some of the large private employers in the area. Going forward, Aetna and Innovation Health have an agreement in place to not quote against each other.

Enrollment has increased quickly in the first years of the plans. The two health plans had a few thousand enrollees at the end of 2013 and grew to about 75,000 by the end of 2015. As of September 2016, combined insured enrollment in the two plans had grown to 100,000 lives. Both companies sell group plans, combining for about 43,000 lives. Innovation Health Insurance also sells to individuals, of which more than 56,500 were enrolled in September 2016. About 90,000 more are in self-funded employer groups.

Besides building the health plans, Inova Health also launched other population health and accountable care initiatives. It formed Signature Partners as a clinically integrated network in 2014 and 2015. Signature Partners is the vehicle for Inova Health's Medicare Shared Savings Program (MSSP) ACO, one of 10 MSSP ACOs primarily serving seniors in Virginia. The ACO network includes the Inova hospitals and physicians, other independent physicians in northern Virginia, and a group of

providers in the western part of the state and in West Virginia. Signature Partners is also a first-tier network for Innovation Health, and enrollees using Signature Partners providers have lower cost-sharing. Health plan leaders said 75 percent of the physicians in the Innovation Health network are outside of Inova Health.

In 2015, the Signature Health Partners MSSP ACO had about 23,300 attributed lives and met the quality performance standards. However, its spending on those seniors was about \$10.4 million higher (5%) in 2015 than the benchmark, and it did not earn shared savings. A leader in the ACO said that the average spending per senior was about \$7,800 in the Fairfax area but much higher in the western part of the state, where the participating providers include rural hospitals and federally qualified health centers.

Innovation Health has ambitious goals for future growth, projecting growth to 500,000 enrollees, both insured and self-funded, in the next three years. Besides expanding its commercial business, Innovation Health plans to add a Medicare Advantage plan for January 2018, centered around the Signature Health Partners network. It also is exploring partnerships with other provider systems in the state, combining some measure of clinical integration with participation in the Innovation Health plans. If it expands statewide, Inova Health leaders project that enrollment in the health plans could reach 1 million.

Both Innovation Health companies were profitable in 2015. Innovation Health Plans reported net income of \$3.4 million, or 4.3 percent of premiums, while Innovation Health Insurance, the bigger of the two, had net income of \$3.1 million, or 1.5 percent of premiums. However, both reported losses in 2016. Innovation Health Insurance lost \$26 million,

and Innovation Health Plans lost \$4.9 million. The plan owners had to contribute \$10 million in additional capital to Innovation Health Insurance and \$5.4 million to Innovation Health Plan.

The Innovation Health plans were net contributors to the ACA reinsurance and risk-adjustment pools based on 2015 and 2016 operations. Data from CMS for 2015 operations shows that Innovation Health Insurance would net about \$300,000 in payment on the individual adjustments and would gain \$2.1 million from risk adjustments for its small group plans. Innovation Health Plan is required to contribute \$6 million to the risk-adjustment pool for its small group plans.

Based on its annual statement for 2016, Innovation Health Plan projects that it will pay in \$9 million to the ACA small group risk-adjustment pool. Innovation Health Insurance will pay \$37.3 million to the risk-adjustment pool, but should get back \$5.3 million from the ACA Reinsurance program. These amounts are subject to a final reconciliation to occur in 2017.

What impact is Innovation Health having in northern Virginia? First, it has achieved significant market share in both the individual and small groups lines of business. Based on data assembled from two sources, it appears that Innovation Health has about 18.1 percent of individual enrollees in the area and about 23.8 percent of small group enrollment. Based on the NAIC data, Kaiser Mid-Atlantic has the most individual members in northern Virginia. (Note that Innovation Health added 21,000 individual members in the first three quarters of 2016, but we are not able to tell if those enrollees came from other health plans. Based on the same denominator, Innovation Health would have 28.6 percent of the individual market.) The data are from the NAIC statements for the Innovation Health

Plans, Kaiser Health Plans of the Mid-Atlantic, and CareFirst Blue Choice, the Blue Cross Blue Shield company in the region. The other source is a report by the Bureau of Insurance, Virginia Commerce Commission, prepared as part of the state's reviews of the proposed acquisitions of Humana by Aetna and CIGNA by Anthem, Inc.<sup>18</sup>

Has Innovation Health made the market for health insurance more competitive and has it had impact on premiums? *Exhibit 6* compares the premium in 2017 for a single male, nonsmoker, living in Fairfax County, and shopping for a Silver Plan at Healthcare.gov. Innovation Health's PPO plan has the lowest monthly premium at \$295.50, with an annual deductible of \$6,075. The most expensive plan is offered by CareFirst, with a monthly premium of \$435 and a deductible of \$3,500. The lower price of the Innovation Health plan helped it gain 21,000 new individual members during the open enrollment period for 2016 benefit plans. The results of the most recent open enrollment season will be reflected in the quarterly financial and enrollment report that Innovation Health files after March 31.

Innovation Health has introduced special diabetes Gold and Silver health plans, called Leap Diabetes Plans. Those plans, designed by Aetna, have lower co-payments for diabetes-related visits to specialists and offers a variety of personal care apps and devices. Enrollees can also earn financial rewards for getting an A1c blood test twice a year and linking their glucometer to an Aetna web site.<sup>19</sup>

Five other health plans are offering a mix of PPO and HMO plans in Fairfax County: CIGNA, UnitedHealthcare, Kaiser Permanente, Anthem HealthKeepers (primarily a Medicaid plan), and CareFirst Blue Choice. All

of them are more expensive than the Innovation Health individual plans. Based on an analysis of rate filings for 2017 benefit years by the Virginia Bureau of Insurance, Innovation Health Insurance increased its premiums by an average of 12.1 percent. By comparison, Kaiser Foundation had an average increase of 25 percent and CareFirst Blue Choice had an average increase of 31.2 percent. For its small group plans, Innovation Health Plans reported an average increase of 11.7 percent, while Kaiser and CareFirst Blue Choice sought smaller increases.

Innovation Health has been able to keep its premium rates relatively low because some of the Inova providers made rate concessions for a period of up to 10 years. That is not likely to be a sustainable strategy for the long term, and it underlines the importance of the health plan being able to reduce care utilization and generate savings to keep costs down and attract more groups and individuals. Inova has pursued its health plan and clinical integration strategies at the same time, but still has significant work to do to bring the two approaches into alignment. For example, Signature Partners Network provides care management services for those Innovation Health enrollees that are attributed to providers of Signature Partners Networks, about 25 percent of the total. Aetna staff provide care management for the others. That contradicts the notion that one of the assets of a provider-sponsored health plan is that enrollees will be more inclined to accept medical advice from their provider system, not the insurance company. Aetna also provides data to the Signature Partners Network and others about patient encounters, but some Inova Health leaders interviewed were dissatisfied with the timeliness and quality of that data.

## Building on ACO and Population Health Strategies: Focus on Memorial Hermann

The Memorial Hermann system is the largest system in the Houston region with 12 hospital campuses and 2015 revenues of \$3.8 billion. The flagship Memorial Hermann hospital is at the Texas Medical Center, while the other campuses ring the region, including developing areas like the Woodlands, Sugar Land, and Memorial City. Methodist Healthcare is the second largest system in the region, followed by Hospital Corporation of America (HCA), which is the largest hospital system in Texas.

While Memorial Hermann is the largest system in the region, the University of Texas M.D. Anderson Cancer Center in Houston is the largest hospital there, with net patient revenues of \$3.745 billion. One local expert described Memorial Hermann, with its hospitals, physician clinics, and broad range of ancillary services, as the most developed integrated system in Houston.

Median household income in Harris County was \$56,670, less than half of Fairfax County. Even with gains in coverage under the ACA, 25.8 percent of adults (740,000) between the ages of 19 and 64 still lack health insurance.

About 9.5 percent of the population (about 385,000 out of 4.092 million) here is age 65 or older. Penetration in senior plans is very high in Harris County with 57 percent of seniors (about 220,000 in January 2017) enrolled in a Medicare Advantage or Special Needs plan. The largest Medicare HMO plans here are SelectCare (41,400 seniors), HealthSpring, and Kelsey Seybold Plan Administrators. The Houston area has a long history of multi-specialty

group practices, like Kelsey Seybold and the former MacGregor Medical Association, (which closed its practices in 2002). Those practices took significant capitation risk, particularly for senior plans.

In the 1990s, several local provider systems had their own health plans. The Memorial Hermann system was a part owner in a Houston area health plan in the 1990s, though it sold that company to Humana in 1999. Currently, two provider systems own large Medicaid plans: Community Health Choice, owned by the Harris County Health District, and Texas Children's Health Plan, owned by that system. Note that the Memorial Hermann system is a major provider to Community Health Choice, seeing more enrollees than the Harris County hospitals and doctors.

The Memorial Hermann system has pursued several major initiatives in the areas of population health and performance-based contracting. Several years ago, Memorial Hermann formed a clinically integrated network called Memorial Hermann Physicians Network, known as MHMD. There are 3,500 physicians practicing in different programs and initiatives through MHMD, including about 150 employed by Memorial Hermann. That organization has been the vehicle for contracting as a Medicare Shared Savings Program ACO and for forming a commercial ACO in partnership with Aetna, marketed as Aetna Whole Health-Memorial Hermann Accountable Care Network. The University of Texas-Houston faculty practice group, with 800 physicians, also participates in some of the MHMD activities.

The Memorial Hermann MSSP ACO has been one of the most successful. For 2015, it had 50,000 attributed lives and earned shared savings of \$41.9 million. Only two other MSSP ACOs had shared savings of \$30 million or

more. In the first year of the MSSP program, the Memorial Hermann ACO had shared savings of \$28.34 million. As the original MSSP ACOs reach the end of their contracts in the next year, Memorial Hermann will need to transition its Medicare ACO to the Next Gen ACO program or another arrangement in which it accepts some measure of downside risk.

The longtime head of the Memorial Hermann system retired in 2016 and was replaced by a physician who was an executive in the Kaiser Permanente organization in California. Some observers take that to mean that the "Kaiser way" will influence the future strategic direction of the Memorial Hermann system.

Memorial Hermann took the first step toward re-entering the health insurance business in 2011. It acquired the inactive UniCare health plan in Texas from Anthem, the for-profit Blue Cross Blue Shield company. It added a second license in 2014 so that it could offer both HMO and PPO products. It also formed a co-branded jointly marketed product with Aetna, as noted above.

Originally, Memorial Hermann assigned hospital executives to run the health plan. After a slow start, it brought in a new CEO in 2016, one with extensive health plan experience who had previously served as an executive for a provider-sponsored plan. Most of the senior leadership team also came on in the past year. Memorial Hermann hired Trizetto to administer claims processing and payment and, at first, to run call centers.

Both Memorial Hermann health plans lost money in 2015. Memorial Hermann Health Insurance, the larger of the two, lost \$9.7 million, or 19.3 percent of revenues of \$50.2 million. Memorial Hermann Health Plan lost \$8.3 million, or 45.9 percent of revenues of \$18 million.

While revenues increased in 2016, neither reported positive net income. Memorial Hermann Insurance Company showed a loss of \$15 million, or 16.2 percent of revenues of \$92.8 million. Memorial Hermann Health Plan reported losses of \$10.9 million, or 19.6 percent of premiums of \$55.7 million.

A benefits consultant in the Houston area commented that the Memorial Hermann brand is highly regarded, but attaching its brand to a health plan may not give a big boost to its market appeal, for at least three reasons. First, if the provider system offers a limited network, not including other well-known providers, employers may be reluctant to buy that plan, especially if it would require employees to change doctors or hospitals. Second, Houston is a market with world class providers, including the University of Texas MD Anderson Cancer Center, the Methodist system, and Texas Children's Hospital. Those providers do great marketing to tout their quality. Third, Memorial Hermann's brand may not have much added appeal to employers that are comparing Memorial Hermann to insurer brand names like Blue Cross Blue Shield, Aetna, and UnitedHealthcare.

The health plan market for individual coverage has been volatile in Texas, especially in Houston. Some new entrants to the individual market, particularly Community Health Choice, gained large numbers of individual members in 2015 and 2016. Community Health Choice, a Medicaid managed care HMO owned by the Harris County Health District, grew from zero individual members at the beginning of 2014 to about 120,000 in September 2016. Other insurers, including Aetna, CIGNA, and Humana, dropped out and did not sell individual insurance in the Houston area for the 2017 benefit year.



Note that Memorial Hermann Health Plan does not sell individual plan on the HealthCare.gov exchange, but only through agents and other channels. That means it is not an option for low-income persons who rely on the subsidies they can only get by buying through an exchange. *Exhibit 6* shows monthly premiums and annual deductibles for the lowest cost Silver Plan for each of the companies selling individual plans in Harris County. In 2017, three other companies offered Silver individual plans that are less expensive than those offered by Memorial Hermann. For both 2017 and 2016, Molina Healthcare offered the lowest premium Silver Plan, with Community Health Choice close behind. Molina added about 120,000 individual enrollees across Texas during the open enrollment period for the 2016 benefit year. It grew from 19,639 in September 2015 to 138,966 in March 2016, though enrollment dropped to 116,699 in September 2016.

For 2016, Memorial Hermann's individual premium for its least expensive Silver Plan was \$317 for an HMO plan and \$377 for a PPO plan. For 2017, the monthly premium for both HMO and PPO plans grew to \$429. The deductible for the lowest priced plan was \$4,500.

## WHY NEW HEALTH PLANS HAVE FAILED

As noted, several of this cohort of newly opened or acquired provider-sponsored health plans failed within a few years. Here are some of the reasons:

1. In general, this has been a tough time for health plan startups. Two plans that have been widely covered, Oscar and Harken Health (a subsidiary of UnitedHealth Group), targeted millennials with special benefits and personal health apps. Both

have suffered large losses, and Oscar withdrew its offerings in New Jersey, California, and Dallas after only a year or two. Harken Health dropped plans for a South Florida expansion in 2016, withdrew its individual plans from state exchanges in Illinois and Georgia, and announced in May 2017 that it would shut down the enterprise.

Another kind of health plan startup was challenged, in part because it didn't have access to outside investors. Under authority of the ACA and with loans from the federal government, 23 health insurance cooperatives were formed. By 2016, all but seven of them had failed.<sup>20</sup> Some of them had been the most popular plans in their state, with a few enrolling more than 100,000 lives. There have been several analyses of what went wrong, including limits on product offerings, marketing, and the ability to seek outside investors.<sup>21</sup>

2. The co-ops and several other new health plans were especially hard hit by one or two of the ACA's 3 Rs. The 3 Rs—reinsurance, risk adjustment, and risk corridors—were supposed to mitigate losses for plans that enrolled a sicker than expected group of enrollees. The government never funded the risk corridor piece of it. After the first year, the federal government paid claims under the risk corridor program at the rate of 12.5 cents on the dollar. Many insurers had booked the full amount expected as a receivable and had set second year premium rates with an assumption that the risk corridor payments would arrive. Risk adjustment was also a serious problem for some, as was described in the discussion of CareConnect. Many of the new insurers, lacking claim history for

their enrollees, were required to contribute to the risk-adjustment pool, in some cases very large sums.

3. Some did not have a realistic assessment of what the business opportunity was or could not reach an adequate enrollment to achieve economies of scale or operate profitably. Two examples of that are the Piedmont WellStar Health Plan, a Medicare Advantage plan formed by two Atlanta health systems, and HealthSpan Integrated, the name given to the former Kaiser Permanente plan in northeast Ohio when it was acquired by the Mercy Health system.

In 2013, as Piedmont and WellStar were designing the new health plan, about 31.2 percent of the seniors in the area were in a Medicare Advantage health plan, suggesting room for further growth. (This is based on four large counties, Cobb, DeKalb, Fulton, and Gwinnett, in the Atlanta region.) The Piedmont-WellStar Health Plan opened for business as a Medicare Advantage health plan on January 1, 2014. It also sold individual plans and administered health benefits for about 35,000 employees and dependents of the two systems. The new health plan closed two years later, after enrolling 15,352 members, mostly seniors. It lost \$11.4 million in 2014 and \$24.4 million in 2015.<sup>22</sup>

The health plan told providers that it was exiting the Medicare business "because of an inability to generate a large enough membership and the required premium revenues needed for long-term operations and sustainability."<sup>23</sup> It also noted that it was expensive to comply with Medicare Advantage rules,

especially when operating with a relatively small number of enrollees.<sup>24</sup>

Two observers suggested that the health plan overestimated the risk-adjustment factor of seniors that would enroll in the plan. In other words, it was expected that a significant number of seniors with chronic conditions who were higher than average utilizers of care would select the new plan. Under Medicare Advantage rules, that would generate higher revenues to the health plan and improve the opportunity for profit if it was able to manage demand for care. Others commented that the plan got the mix of enrollees that it expected, but that inadequacies in IT and coding systems resulted in lower risk scores and lower payments.

The Mercy Health system acquired the Kaiser Permanente health plan and clinics in northeast Ohio 2013. While the Kaiser plan was highly rated by Medicare, it had struggled to compete with other major insurers. In the previous five years, the Kaiser plan in Ohio had losses of \$143.1 million, and its enrollment dropped by more than 50,000 lives. The Mercy system has only one hospital in the area, in Lorain, about 35 miles west of downtown Cleveland, so that brand is not well recognized.

To complicate matters further, the Kaiser health plan and clinics were renamed HealthSpan Integrated, a

brand that was even less well known. It was the name of a Mercy Health company that administered plans for self-insured employer groups. Mercy extended the HealthSpan brand in 2013 as part of investing \$250 million in the Summa Health System to acquire a 30 percent ownership share. HealthSpan was formed as a secular, auxiliary organization of Catholic Health Partners (Mercy Health in Ohio), so that Summa Health could continue to operate without complying with the Ethical and Religious Directives for Catholic health care services.

Another problem for the new health plan owners was a change in hospital referrals. Kaiser had mostly used Cleveland Clinic hospitals, while HealthSpan primarily was admitting enrollees to University Health facilities. While both systems are highly regarded, the Cleveland Clinic affiliation likely had stronger appeal to employers and some individuals.

Mercy Health took over a network of Permanente Medical Group clinics that, with a few key exceptions, had not been updated and were not in locations of high household incomes and rich insurance coverage. One interviewee commented that this had been a challenge to Kaiser, which decided that it could not justify the investment required to upgrade and relocate the clinics.

In 2014, HealthSpan Integrated lost \$53.7 million, and its enrollment dropped to 74,800. The health plan's

losses increased in 2015 to \$217.6 million, and enrollment dropped to about 62,250. One observer commented that the loss of the Kaiser brand resulted in some of the enrollment loss, though enrollment had dropped sharply under Kaiser.

In the fall of 2015, HealthSpan/Mercy announced that it would shutter the clinics, expecting that many of the doctors and the real estate would move to the MetroHealth, Summa Health, and Mercy Health systems in northeast Ohio. In early 2016, Mercy Health also pulled the plug on the health plan, announcing that it would encourage enrollees to migrate to plans offered by Medical Mutual Insurance, one of the largest health insurers in northeast Ohio.

The MetroHealth system in Cleveland, the county health system, absorbed many of the HealthSpan doctors and took over some of the real estate. MetroHealth operates some of those sites as health centers, including a few with emergency departments, and has announced plans to add a small number of inpatient beds at those sites. This fits well with MetroHealth's new emphasis on population health management and its strategy of adding new clinic sites, and expanding its geographic reach in the region. MetroHealth has used its expanded geographic presence in a gain-sharing arrangement for Medicaid enrollees insured by CareSource, the largest Medicaid health plan in Ohio.

# CONCLUSION

Dozens of provider systems have established their own health plans since 2010. Anticipating significant changes in payment in the future, they have embraced the notion of climbing to the top of the health care food chain by becoming health insurers. Some have started a health plan as a defensive move, seeking to replace patients they have lost to other systems.

Based on the analysis reported here, it is hard to identify any of the new cohort of provider-sponsored health plans that show strong promise. Five in that group have already failed, and two national hospital systems announced their intent to reduce or even end their ventures into the health plan business.

A few new plans have enjoyed some success, reaching enrollments of 100,000 in just a few years. However, almost all these plans continue to operate at a loss, in some cases reporting very large losses. When that happens, the provider owners must contribute additional capital to comply with solvency requirements, leaving less for investments in care delivery, new or improved facilities, or health information technology.

The key to success for provider-sponsored health plans is the ability to enunciate and then deliver on a value proposition: a provider system and its affiliated physicians and hospitals providing high-quality medical care at a lower cost, enabling the health plan to sell insurance at a lower price than competitors. Some of the new plans are among the lowest priced plans for individuals and small groups, and their presence is adding competition and benefits. But, so far, the plans reviewed in this research are only able to price competitively by paying their own providers below market rates. That is not a strategy that can be sustained for long.

Many of these provider systems are engaged in other initiatives around clinical integration, performance based-contracting, and population health improvement. These strategies are challenging, as is pursuing a health plan strategy, and success takes years to achieve. A few have been very successful, for example, as Medicare Shared Savings Program ACOs. Still, those capabilities have not yet been aligned with the health plan's operations.

As this report is being finalized in May 2017, the U.S. House of Representatives has passed its American Health Care Act (AHCA). If enacted, the law would change and reduce in many cases the subsidies for low-income families to buy insurance. It would also reverse parts of the ACA Medicaid expansion and cut Medicaid spending by more than \$800 billion over 10 years. At the same time, the administration has taken steps that raise uncertainty in the market for individual insurance.

The changes in Medicaid could create new opportunities for health insurers, including those that are provider-sponsored. States facing reduced Medicaid funding might increase their use of managed care organizations to manage care for recipients, especially those who are aged or disabled. At the same time, states may press down hard on Managed Care Organizations (MCO) margins, to make the dollars go further. The continued uncertainty in the individual markets, combined with proposed changes in rules on mandates and essential benefits, makes that business opportunity riskier for health insurers. They may face problems of adverse selection as healthier persons exit the market altogether or select low-cost plans with very limited benefits.

Given all these challenges, it is likely that more of this new cohort of provider-sponsored health plans will reconsider their commitment to adding the capital, energy, and focus needed to sustain a health plan long enough to achieve success. For those reasons, and others, the prospects for success by these new health plans are not strong.

# Appendix

## Exhibit 01 Overview of Provider-Sponsored Health Plans, By Year of Commenced Business

Decade Commenced Insurance Business	Number of Active Health Plans	Median Enrollment, 2015	Median Revenue, 2015	Median Net Income, 2015	Median Margin, 2015
Pre 1980	13	245,559	\$1,270,628,609	-\$5,086,737	-0.5%
1980-1989	29	176,257	\$829,904,664	\$3,639	0.0%
1990-1999	43	73,201	\$360,244,999	-\$113,061	-0.1%
2000-2009	24	19,266	\$121,895,218	\$2,287,345	2.4%
2010-2016	33	4,084	\$5,315,694	-\$2,618,254	-25.5%

## Exhibit 02 Capital and Use of Capitation by Provider-Sponsored Health Plans, By Year of Business Start

Decade Commenced Insurance Business	Median Capital	Median Capitation Payments	Median Medical Spending	% Paid Through Capitation
Pre 1980	\$206,815,000	\$19,005,193	\$1,152,548,000	1.6%
1980-1989	\$64,539,891	\$83,803,294	\$733,195,777	11.4%
1990-1999	\$51,573,428	\$9,177,360	\$341,569,752	2.7%
2000-2009	\$18,521,335	\$4,073,510	\$108,469,093	3.8%
2010-2016	\$6,577,371	-	\$6,982,257	0.0%

## Exhibit 03 Overview of Provider-Sponsored Health Plans Formed Since 2010 (Sorted by State)

Health Plan	Owner/Parent	City	State	Commenced Business	2015 Enrollment	2015 Revenues	Largest Line of Business
QualChoice Advantage	Catholic Health Initiatives	Little Rock	AR	1/1/15	-	-	Medicare
Health Choice Arizona	IASIS Healthcare	Phoenix	AZ	4/2/13	4,481	10,146,711	Individual
University of Arizona Health Plan	The University of Arizona Health Plans	Tucson	AZ	1/1/14	8,249	17,772,137	NA
Stanford Healthcare Advantage	Stanford Medicine	Stanford	CA	1/1/14	83	459,272	Medicare
Sutter Health Plus	Sutter Health	Sacramento	CA	1/1/13	26,361	77,177,115	Group

Exhibit 03 Cont. Overview of Provider-Sponsored Health Plans Formed Since 2010 (Sorted by State)

Health Plan	Owner/Parent	City	State	Commenced Business	2015 Enrollment	2015 Revenues	Largest Line of Business
Health First Insurance Company	Health First Group	Rockledge	FL	1/1/16	-	-	Medicare
Piedmont-WellStar Health Plan	Piedmont and WellStar Health Systems	Atlanta	GA	1/1/14	15,352	115,587,827	Medicare
Land of Lincoln Health	Illinois Health and Hospital Association	Chicago	IL	4/9/13	50,280	147,398,319	NA
HealthPartners UnityPoint Health Insurance Company	HealthPartners (MN) and UnityPoint Health (IA)	West Des Moines	IA	1/28/16	0	0	Medicare
HarvestPlains Health of Iowa	Catholic Health Initiatives	Des Moines	IA	1/1/15	-	-	Medicare
RiverLink Health of Kentucky	Catholic Health Initiatives	Cincinnati	KY	1/1/15	433	3,055,853	Medicare
StableView Health, Inc.	Catholic Health Initiatives	Lexington	KY	1/1/15	77	588,221	Medicare
Hopkins Health Advantage	Hopkins Health Advantage Inc.	Glen Burnie	MD	11/21/14	-	-	Medicare
McLaren Health Plan Community	McLaren Health	Flint	MI	2/16/12	-	-	Group
Gundersen Health Plan of Minnesota	Gundersen Health - University of Wisconsin Health	La Crosse, WI	MN	2/15/12	948	5,315,694	Medicare
Care N Care Insurance Company of NC	Care N Care Insurance Company Inc.	Greensboro	NC	1/28/15	-	-	Medicare
HeartlandPlains Health	Catholic Health Initiatives	Omaha	NE	1/1/15	519	3,489,316	Medicare
Tufts Health Freedom Plan	Tufts Group	Concord	NH	4/27/15	-	-	Group
Clover Insurance Company	CarePoint Health	Jersey City	NJ	2/6/14	-	616,666	Medicare
CareConnect	Northwell Health (former North Shore LIJ system)	Great Neck	NY	10/1/13	69,374	124,605,078	Group
Crystal Run Health Insurance Company	Crystal Run Health Group	Middletown	NY	6/1/16	1,894	2,131,539	Group
Crystal Run Health Plan	Crystal Run Health Group	Middletown	NY	10/1/15	330	75,135	Group
Aultcare Health Insuring Corp.*	Aultman Health Foundation	Canton	OH	1/1/15	20,252	226,733,360	NA
HealthSpan	Mercy Health Group	Cincinnati	OH	7/30/13	12,330	53,647,920	Individual
Premier Health Insuring Corp.	Premier Health Partners Group	Dayton	OH	4/22/14	7,722	59,495,348	Medicare
Premier Health Plan	Premier Health Partners Group	Dayton	OH	3/13/14	2,726	8,176,903	Individual

**Exhibit 03 Cont.** Overview of Provider-Sponsored Health Plans Formed Since 2010 (Sorted by State)

Health Plan	Owner/Parent	City	State	Commenced Business	2015 Enrollment	2015 Revenues	Largest Line of Business
RiverLink Health	Catholic Health Initiatives	Cincinnati	OH	1/1/15	650	4,052,746	Medicare
UPMC Health Coverage	UPMC Health System	Pittsburgh	PA	8/1/14	6,866	27,538,452	Group
ClearRiver Health	Catholic Health Initiatives	Chattanooga	TN	1/1/15	282	1,963,766	Medicare
Christus Health Plan	Christus Health	Dallas	TX	3/1/12	7,668	21,160,832	Individual
Memorial Hermann Health Plan	Memorial Hermann	Houston	TX	4/25/14	3,686	17,985,376	Group
Prominence Health First (formerly St Mary's Health Plans)	Universal Health Services, Inc.	Reno	TX	2/19/14	499	3,618,428	Individual
Innovation Health Insurance	Aetna Group	Falls Church	VA	4/3/13	52,474	204,634,972	Individual
Innovation Health Plan	Aetna Group	Falls Church	VA	4/3/13	22,874	79,593,241	Group
Sentara Health Insurance of NC	Sentara Health Mgmt. Group	Virginia Beach	VA	11/21/14	-	-	NA
Network Health Insurance Corp.	Network Health Group	Menasha	WI	4/1/13	77,733	556,516,298	Medicare
Wisconsin Collaborative Insurance Company	Anthem Inc., Aurora Health	Milwaukee	WI	4/19/16	-	-	NA
<b>Health Plans Acquired by Provider Systems After 2010</b>							
QualChoice Life and Health Insurance Company	Catholic Health Initiatives	Little Rock	AR	1965	10,309	101,558,030	Individual
Harbor Health Plan	Tenet Health	Detroit	MI	2000	6,638	36,576,814	Medicaid
HealthSpan Integrated Care (former Kaiser Permanente Ohio)	Mercy Health Ohio	Cleveland	OH	1976	62,249	358,571,953	Group
Memorial Hermann Insurance Company	Memorial Hermann Health	Houston	TX	2001	13,125	50,221,939	Group
Prominence Health (former Soundpath Health)	Catholic Health Initiatives	Federal Way	WA	2008	21,158	155,193,903	Medicare

\* AultCare Health Insuring Corp. is the successor health plan to an accident and health insurer, AultCare Insurance, which commenced business in 1989.

**Exhibit 04** Enrollment in Provider-Sponsored Health Plans Formed Since 2010

Health Plan	State	2014 Enrollment	2015 Enrollment	3rd Quarter 2016				
				Individual	Group	Medicare	Medicaid	TOTAL
QualChoice Advantage	AR	-	-	-	-	1,848	-	1,848
Health Choice Arizona	AZ	430	4,481	10,912	-	-	-	10,912
University of Arizona Health Plan	AZ	233	8,249	-	-	-	-	-
Stanford Healthcare Advantage	CA	-	83	-	-	1,043	-	1,043
Sutter Health Plus	CA	8,307	26,361	972	44,292	-	-	45,264
Health First Insurance Company	FL	-	-	13,959	4,260	34,893	-	53,112
Piedmont WellStar Health Plans, Inc.	GA	9,349	15,352	-	-	-	-	-
HealthPartners UnityPoint Health	IA	-	-	-	-	-	-	-
Land of Lincoln Health	IL	3,461	50,280	-	-	-	-	-
HarvestPlains Health of Iowa	IA	-	-	-	-	389	-	389
RiverLink Health of Kentucky	KY	-	433	-	-	1,129	-	1,129
StableView Health, Inc.	KY	-	77	-	-	200	-	200
Hopkins Health Advantage	MD	-	-	-	-	4,706	-	4,706
McLaren Health Plan Community	MI	-	-	2,113	16,971	-	-	19,084
Gundersen Health Plan of Minnesota	MN	795	948	-	319	705	-	1,024
Care N Care Insurance Company of NC	NC	-	-	-	-	6,433	-	6,433
HeartlandPlains Health	NE	-	519	-	-	891	-	891
Tufts Health Freedom Plan	NH	-	-	-	1,063	-	-	1,063
Clover Insurance Company	NJ	-	-	-	-	18,996	-	18,996
CareConnect	NY	11,662	69,374	29,311	70,525	-	-	99,836
Crystal Run Health Insurance Company	NY	-	1,894	-	2,510	-	-	2,510
Crystal Run Health Plan	NY	-	330	1,343	1,384	-	448	3,175
Aultcare Health Insuring Corp.	OH	-	20,252	-	-	20,934	-	20,934

**Exhibit 04 Cont.** Enrollment in Provider-Sponsored Health Plans Formed Since 2010

				3rd Quarter 2016				
Health Plan	State	2014 Enrollment	2015 Enrollment	Individual	Group	Medicare	Medicaid	TOTAL
HealthSpan	OH	15,083	12,330	2,343	-	-	-	2,343
Premier Health Insuring Corp.	OH	-	7,722	-	-	9,372	-	9,372
Premier Health Plan	OH	-	2,726	5,672	711	-	-	6,383
RiverLink Health	OH	-	650	-	-	1,301	-	1,301
UPMC Health Coverage	PA	3,793	6,866	-	5,962	-	-	5,962
ClearRiver Health	TN	-	282	-	-	550	-	550
Christus Health Plan	TX	7,893	7,668	17,270	-	262	6,675	24,207
Memorial Hermann Health Plan	TX	-	3,686	2,106	4,292	4,083	-	10,481
Prominence Health First (formerly St Mary's Health Plans)	TX	-	499	3,115	12	1,422	-	4,549
Innovation Health Insurance	VA	38,641	52,474	56,566	16,846	-	-	73,412
Innovation Health Plan	VA	18,580	22,874	-	26,582	-	-	26,582
Sentara Health Insurance of NC	VA	-	-	-	-	-	-	-
Network Health Insurance Corp.	WI	70,584	77,733	32	1,133	64,063	-	65,228
Wisconsin Collaborative Insurance Company	WI	-	-	-	-	-	-	-
<b>Plans Acquired Since 2010</b>								
QualChoice Life and Health Insurance	AR	-	23,168	29,399	3,646	-	-	35,609
Harbor Health Plan	MI	6,034	6,638	2,813	-	656	8,229	11,698
HealthSpan Integrated Care (former Kaiser Permanente Ohio)	OH	74,819	62,249	2,204	-	15,524	-	17,728
Memorial Hermann Insurance Company	TX	10,572	13,125	6,030	14,083	1,157	-	21,270
Prominence Health (Soundpath Health)	WA	16,347	21,158	-	-	27,077	-	27,077



## Exhibit 05 Profitability in 2015 of Provider-Sponsored Health Plans Formed Since 2010

Health Plan	State	2015 Revenues	2015 Net Income	Margin
QualChoice Advantage	AR	-	8,596	
Health Choice Arizona	AZ	10,146,711	-1,101,749	-10.9%
University of Arizona Health Plan	AZ	17,772,137	-2,515,382	-14.2%
Stanford Healthcare Advantage	CA	459,272	-4,155,342	-904.8%
Sutter Health Plus	CA	77,177,115	-27,462,508	-35.6%
Health First Insurance Company	FL	-	-13,848	
Piedmont WellStar Health Plans, Inc.	GA	115,587,827	-24,412,545	-21.1%
HealthPartners UnityPoint Health	IA	-	-	
Land of Lincoln Health	IL	147,398,319	-90,800,168	-61.6%
HarvestPlains Health of Iowa	IA	-	6,965	
RiverLink Health of Kentucky	KY	3,055,853	-368,295	-12.1%
StableView Health, Inc.	KY	588,221	-472,155	-80.3%
Hopkins Health Advantage	MD	-	-8,599,857	
McLaren Health Plan Community	MI	-	-22,243	
Gundersen Health Plan of Minnesota	MN	5,315,694	-728,654	-13.7%
Care N Care Insurance Company of NC	NC	-	-1,403,523	
HeartlandPlains Health	NE	3,489,316	-1,866,953	-53.5%
Tufts Health Freedom Plan	NH	-	-6,516,167	
Clover Insurance Company	NJ	616,666	-	0.0%
CareConnect	NY	124,605,078	-31,834,462	-25.5%
Crystal Run Health Insurance Company	NY	2,131,539	-3,452,139	-162.0%
Crystal Run Health Plan	NY	75,135	-3,252,731	-4329.2%
Aultcare Health Insuring Corp.	OH	226,733,360	-3,928,339	-1.7%
HealthSpan	OH	53,647,920	-28,166,252	-52.5%
Premier Health Insuring Corp.	OH	59,495,348	-13,616,589	-22.9%
Premier Health Plan	OH	8,176,903	-5,330,135	-65.2%
RiverLink Health	OH	4,052,746	-1,157,347	-28.6%
UPMC Health Coverage	PA	27,538,452	7,730,735	28.1%
ClearRiver Health	TN	1,963,766	-1,283,887	-65.4%
Christus Health Plan	TX	21,160,832	-5,247,287	-24.8%
Memorial Hermann Health Plan	TX	17,985,376	-8,250,706	-45.9%
Prominence Health First formerly St Mary's Health Plans	TX	3,618,428	-2,618,254	-72.4%
Innovation Health Insurance	VA	204,634,972	3,111,954	1.5%

**Exhibit 05 Cont.** Profitability in 2015 of Provider-Sponsored Health Plans Formed Since 2010

Health Plan	State	2015 Revenues	2015 Net Income	Margin
Innovation Health Plan	VA	79,593,241	3,438,659	4.3%
Sentara Health Ins of NC	VA	-	-	
Network Health Insurance Corporation	WI	556,516,298	-5,683,514	-1.0%
Wisconsin Collaborative Insurance Company	WI	-	-	
<b>Health Plans Acquired by Provider Systems After 2010</b>				
QualChoice Life and Health Insurance	AR	61,879,954	-5,133,543	-8.3%
Harbor Health Plan	MI	9,232,984	321,759	3.5%
HealthSpan Integrated Care (former Kaiser Permanente Ohio)	OH	360,244,999	-217,563,001	-60.4%
Memorial Hermann Health Insurance	TX	50,221,939	-9,704,455	-19.3%
Prominence Health (Soundpath Health)	WA	155,193,903	-17,252,888	-11.1%

**Exhibit 06** Comparison of Silver Plan Prices for Individual Health Plans, 2017 Plan Year, and Increase Over 2016

<b>Care Connect Garden City, Nassau County 11530 40-year old male single coverage Exchange: New York State of Health, <a href="https://nystateofhealth.ny.gov/">https://nystateofhealth.ny.gov/</a></b>				
<b>Fidelis Care</b>			<b>Affinity Health Plan</b>	
2017 Premium	\$446.10	(+12.8%)	2017 Premium	\$493.55 (+18.3%)
Deductible	\$2,000		Deductible	\$2,000
2016 Premium	\$395.41		2016 Premium	\$417.34
<b>HealthFirst</b>			<b>Empire Blue Cross Blue Shield HMO</b>	
2017 Premium	\$453.55	(+7.4%)	2017 Premium	\$510.38 (+9.3%)
Deductible	\$2,000		Deductible	\$5,250
2016 Premium	\$422.41		2016 Premium	\$466.95
<b>Oscar</b>			<b>Emblem Health</b>	
2017 Premium	\$483.44	(+12.3%)	2017 Premium	\$589.68 (+14.6%)
Deductible	\$7,150		Deductible	\$2,000
2016 Premium	\$430.44		2016 Premium	\$514.55
<b>Care Connect EPO</b>			<b>UnitedHealthcare</b>	
2017 Premium	\$487.00	(+27.2%)	2017 Premium	\$714.09 (+28.6%)
Deductible	\$3,000		Deductible	\$2,000
2016 Premium	\$383.00		2016 Premium	\$555.39

**Innovation Health**  
**Fairfax County, VA 22030**  
**40-year old male single coverage**  
**Exchange: [Healthcare.Gov](https://www.healthcare.gov)**

Innovation Health Insurance Company PPO			Kaiser Permanente HMO		
2017 Premium	\$295.50	(+9.3%)	2017 Premium	\$329.11	(+16.0%)
Deductible	\$6,075		Deductible	\$6,000	
2016 Premium	\$270.47		2016 Premium	\$283.65	
Innovation Health Leap Silver Diabetes PPO			Anthem HealthKeepers HMO		
2017 Premium	\$309.17		2017 Premium	\$335.73	(+10.9%)
Deductible	\$6,300		Deductible	\$5,000	
2016 Premium	\$270.47		2016 Premium	\$302.64	
CIGNA Health and Life Insurance Company EPO			CareFirst BlueChoice HMO		
2017 Premium	\$313.29		2017 Premium	\$435.01	(+22.2%)
Deductible	\$4,500		Deductible	\$3,500	
2016 Premium	\$270.47		2016 Premium	\$356.04	
UnitedHealthcare of the Mid-Atlantic HMO					
2017 Premium	\$319.19	(+10.6%)			
Deductible	\$5,200				
2016 Premium	\$288.48				

**Memorial Hermann Health Plan**  
**Harris County, TX 77096**  
**40-year old male single coverage**  
**Exchange: [Healthcare.gov](https://www.healthcare.gov)**

Molina Marketplace HMO			Memorial Hermann Health Plan HMO (not on exchange)		
2017 Premium	\$282.60	(+11.8%)	2017 Premium	\$429.04	(HMO & PPO) (+35.3%)
Deductible	\$2,400		Deductible	\$4,500	
2016 Premium	\$252.67		2016 Premium	\$317.03	(HMO)
Community Health Choice HMO			Memorial Hermann Health Insurance PPO (not on exchange)		
2017 Premium	\$310.54	(+19.1%)	2016 Premium	\$377.19	
Deductible	\$1,500		Deductible	\$2,600	
2016 Premium	\$260.66				
All-Savers Insurance Company EPO			Blue Cross Blue Shield of Texas HMO		
2016 Premium	\$291.92		2017 Premium	\$430.54	(+47.3%)
			Deductible	\$3,000	
Community Health Choice Kelsey Care HMO			2016 Premium	\$291.97	
2017 Premium	\$327.53				
Deductible	\$0		CIGNA Healthcare of Texas HMO		
2016 Premium	\$270.47		2016 Premium	\$276.10	
Aetna Life Insurance EPO			Humana Health Plan of Texas HMO		
2016 Premium	\$345.13		2016 Premium	\$375.02	

Sources: Analysis of data from [Healthcare.gov](https://www.healthcare.gov) and New York State of Health websites

# Endnotes

1. Even in California, one of the few states where a high percentage of provider payments is still made to medical groups and independent practice associations (IPAs) through capitation, that proportion has declined sharply. Recent research from the California Health Care Foundation found that the number of commercial enrollees outside of Kaiser Permanente had fallen from 6.3 million in 2004 to 3.6 million in 2015, with most of them moving to PPO arrangements, where providers are paid fee-for-service. See Laura Tollen, "As Commercial Capitation Sinks, Can California's Capitated Physician Organizations Stay Afloat," California HealthCare Foundation, 2016.
2. Paul M. Ellwood, Alain C. Enthoven and Lynn Etheridge, "The Jackson Hole Initiatives for a Twenty-First Century American Health Care System," *Health Economics*, Vol.1: 149-168 (1992).
3. See, for example, The Advisory Board, *Capitation Strategy*, Washington, DC, 1994. In fact, by the end of the 1990s, the market in most states moved away from capitation, in part because of the anti-managed care backlash led by physicians and advocacy groups and because payments to Medicare health plans were generally flat, leading providers to drop their capitation contracts. Minnesota HMOs, for example, made 32.1% of their provider payments through capitation in 1993, about two-thirds of that through HealthPartners. By 2004, less than 1% of provider payments by Minnesota HMOs were through capitation arrangements.
4. *Becker's Hospital Review*, "Tenet to sell multiple hospitals, home health business," January 17, 2017. Accessed at: <http://www.beckershospitalreview.com/hospital-transactions-and-valuation/tenet-to-sell-multiple-hospitals-home-health-business.html>.
5. Melanie Evans, "Big Hospital Operator Retreats From Health-Insurance Foray," *Wall Street Journal*, December 15, 2016. <https://www.wsj.com/articles/big-hospital-operator-retreats-from-health-insurance-foray-1481814003>.
6. Gundersen Health and University of Wisconsin Health agreed in 2016 to merge their respective HMOs. Later that year, they entered into talks about absorbing Physicians Plus Insurance Company, the HMO of Meriter Health, a Madison, WI hospital acquired by UnityPoint Health in 2013. UnityPoint has partnered with HealthPartners to form a Medicare Advantage health plan in Illinois and Iowa, which enrolled its first seniors as of January 2017.
7. See, for example, David Introcasse and Gregory Berger, "MSSP Year Two: Medicare ACOs Show Muted Success," *Health Affairs Blog*, September 24, 2015.
8. Interview with Carolyn Magill, formerly of Evolent Health, March 14, 2016.
9. The K&L Gates law firm published a useful summary of the position of the Federal Trade Commission on the elements required for competing providers to negotiate together with payers and pass antitrust scrutiny. [http://m.klgates.com/files/Publication/fc2de2e2-eaf1-4c06-8f33-749bd4e6c152/Presentation/PublicationAttachment/140a0193-858f-40d6-b9c1-7b17fcd2afdb/Antitrust\\_Alert\\_03252013.pdf](http://m.klgates.com/files/Publication/fc2de2e2-eaf1-4c06-8f33-749bd4e6c152/Presentation/PublicationAttachment/140a0193-858f-40d6-b9c1-7b17fcd2afdb/Antitrust_Alert_03252013.pdf).
10. Interview with Diane Holder, CEO of UPMC Health Plans, April 7, 2016.
11. Interview with Thomas Cassels, The Advisory Board, November 9, 2015.
12. Interview with Walt Meyers and Kaiser Permanente Competitive Assessment Team, December 14, 2016.
13. Interview with Joseph Damore, Premier, November 29, 2016. Walt Meyers noted that some provider-sponsored health plans, like Sharp in the San Diego area, benefit from having a well-defined geography and can maintain the right balance of being a provider partner to the other local health plans while operating its own health plan.
14. Interview with Joseph Damore, Premier, Inc., November 29, 2016.
15. Bob Herman, "ACA's risk adjustment hammers small plans again," *Modern Healthcare*, June 30, 2016.
16. Interviews with Laurel Pickering, Northeast Business Group on Health and Greg Burke, United Hospital Fund, October 20, 2016.
17. Based on research conducted for Peter Newell and Allan Baumgarten, "The Big Picture V: New York's Private and Public Markets, 2012," United Hospital Fund, May 2014.
18. Eric Lowe and Glenn Watkins, "An Economic Analysis of the Market Structure and Likely Effect on Competition in the Commonwealth of Virginia as a Result of the Acquisition of Humana, Inc. by Aetna, Inc.," Virginia State Corporation Commission, Bureau of Insurance, March 15, 2016.
19. Michelle Andrews, "New Health Plans Offer Discounts for Diabetes Care," Kaiser Health News, November 17, 2015. Accessed at <http://khn.org/news/new-health-plans-offer-discounts-for-diabetes-care/>. See a summary of benefits for 2016 here: [http://innovation-health.s3.amazonaws.com/SBC\\_2016\\_VA\\_GoldDiabetes\\_ON.pdf](http://innovation-health.s3.amazonaws.com/SBC_2016_VA_GoldDiabetes_ON.pdf).
20. Phil Galewitz, "Seven Remaining Obamacare Co-ops Prepare Survival Strategies," *Kaiser Health News*, July 13, 2016. <http://khn.org/news/seven-remaining-obamacare-co-ops-prepare-survival-strategies>.
21. Tom Worstall, "The Problem With Health Care Coops: No Capitalists to Absorb the Losses," *Forbes*, September 26, 2015. <https://www.forbes.com/sites/timworstall/2015/09/26/the-problem-with-health-care-coops-no-capitalists-to-absorb-the-losses/#eb51fc171552>.
22. In its initial public offering documents, Evolent Health identified Piedmont WellStar Health Plan as its third largest partner or contract, accounting for 17% of revenues in the first quarter of 2015.
23. Andy Miller, "Hospitals retreat from insurance venture," *Atlanta Journal-Constitution* online content, September 25, 2015.
24. Note that Catholic Health Initiatives started five Medicare plans in different states, which combined had less than 6,000 lives in 2016. It administered all the plans from a central office near Seattle. Still, the administrative expenses of reporting and compliance are significant, especially spread across a small number of enrollees.

## About the Author

Allan Baumgarten is an independent research analyst whose work focuses on health care policy, finance and local market strategies. He publishes *Minnesota Health Market Review* and reports in eight other states analyzing trends and strategies for health care payers and providers. He works with a variety of organizations to help them analyze the market competition and policy issues they face and to develop business strategies to meet the challenges of dynamic markets and health reform. His clients include health plans, provider organizations, government agencies and manufacturers of pharmaceuticals and other health products and services. For more information, visit [www.allanbaumgarten.com](http://www.allanbaumgarten.com).

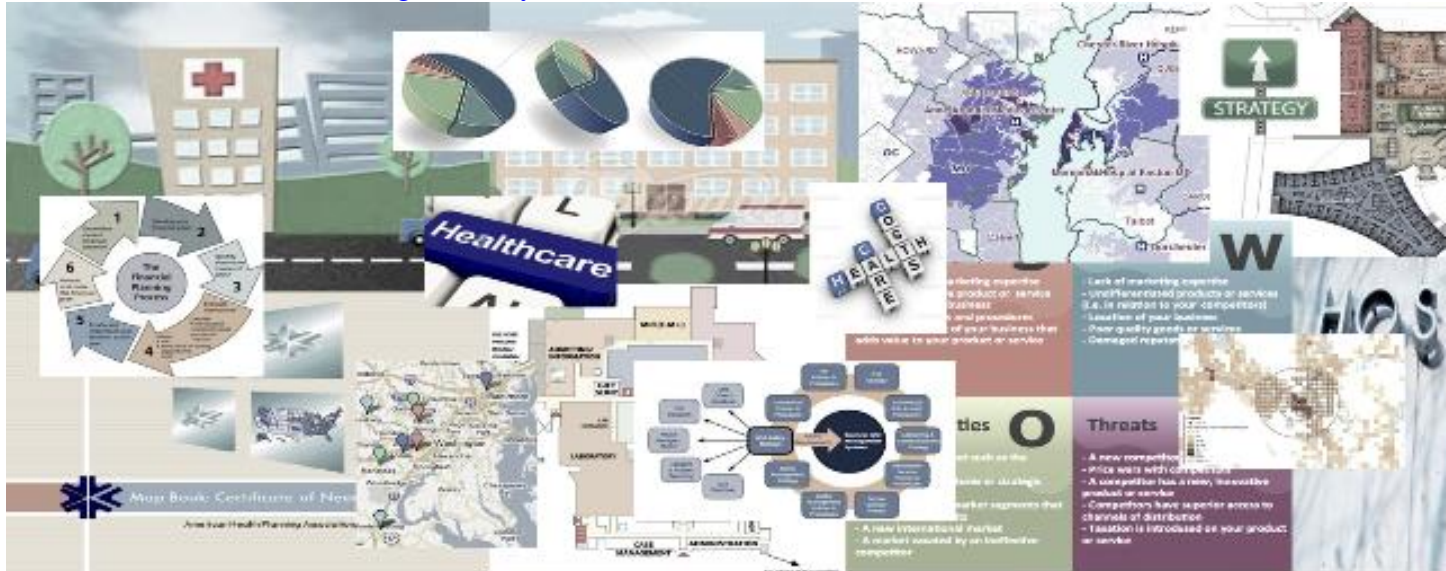
## About the Robert Wood Johnson Foundation

For more than 40 years the Robert Wood Johnson Foundation has worked to improve health and health care. We are working with others to build a national Culture of Health enabling everyone in America to live longer, healthier lives. For more information, visit [www.rwjf.org](http://www.rwjf.org). Follow the Foundation on Twitter at [www.rwjf.org/twitter](http://www.rwjf.org/twitter) or on Facebook at [www.rwjf.org/facebook](http://www.rwjf.org/facebook).

# AHPA

American Health Planning Association 

[Home](#) [About AHPA](#) [Planning & Policy](#) [Certificate of Need](#) [Resources](#)



[Certificate of Need](#)

## State CON Websites

State CON Websites		
<a href="#">Alabama</a>	<a href="#">Alaska</a>	<a href="#">Arkansas</a>
<a href="#">Connecticut</a>	<a href="#">Delaware</a>	<a href="#">District of Columbia</a>

<a href="#">Florida</a>	<a href="#">Georgia</a>	<a href="#">Hawaii</a>
<a href="#">Illinois</a>	<a href="#">Iowa</a>	<a href="#">Kentucky</a>
<a href="#">Louisiana</a>	<a href="#">Maine</a>	<a href="#">Maryland</a>
<a href="#">Massachusetts</a>	<a href="#">Michigan</a>	<a href="#">Mississippi</a>
<a href="#">Missouri</a>	<a href="#">Montana</a>	<a href="#">Nebraska</a>
<a href="#">Nevada</a>	<a href="#">North Carolina</a>	<a href="#">New Jersey</a>
<a href="#">New York</a>	<a href="#">Oregon</a>	<a href="#">Ohio</a>
<a href="#">Oklahoma</a>	<a href="#">Tennessee</a>	<a href="#">Rhode Island</a>
<a href="#">South Carolina</a>	<a href="#">Washington</a>	<a href="#">Vermont</a>
<a href="#">Virginia</a>	<a href="#">West Virginia</a>	<a href="#">Wisconsin</a>

# Health Affairs

At the Intersection of Health, Health Care and Policy

Cite this article as:

David Lassman, Andrea M. Sisko, Aaron Catlin, Mary Carol Barron, Joseph Benson, Gigi A. Cuckler, Micah Hartman, Anne B. Martin and Lekha Whittle  
Health Spending By State 1991–2014: Measuring Per Capita Spending By Payers And Programs

*Health Affairs* published online June 14, 2017

The online version of this article, along with updated information and services, is available at:

<http://content.healthaffairs.org/content/early/2017/06/13/hlthaff.2017.0416>

**For Reprints, Links & Permissions :**

[http://content.healthaffairs.org/1340\\_reprints.php](http://content.healthaffairs.org/1340_reprints.php)

**Email Alertings :** <http://content.healthaffairs.org/subscriptions/etoc.dtl>

**To Subscribe :** <https://fulfillment.healthaffairs.org>

*Health Affairs* is published monthly by Project HOPE at 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133. Copyright © by Project HOPE - The People-to-People Health Foundation. As provided by United States copyright law (Title 17, U.S. Code), no part of may be reproduced, displayed, or transmitted in any form or by any means, electronic or mechanical, including photocopying or by information storage or retrieval systems, without prior written permission from the Publisher. All rights reserved.

Not for commercial use or unauthorized distribution

By David Lassman, Andrea M. Sisko, Aaron Catlin, Mary Carol Barron, Joseph Benson, Gigi A. Cuckler, Micah Hartman, Anne B. Martin, and Lekha Whittle

DOI: 10.1377/hlthaff.2017.0416  
HEALTH AFFAIRS 36,  
NO. 7 (2017): –  
©2017 Project HOPE—  
The People-to-People Health  
Foundation, Inc.

# Health Spending By State 1991–2014: Measuring Per Capita Spending By Payers And Programs

**ABSTRACT** As the US health sector evolves and changes, it is informative to estimate and analyze health spending trends at the state level. These estimates, which provide information about consumption of health care by residents of a state, serve as a baseline for state and national-level policy discussions. This study examines per capita health spending by state of residence and per enrollee spending for the three largest payers (Medicare, Medicaid, and private health insurance) through 2014. Moreover, it discusses in detail the impacts of the Affordable Care Act implementation and the most recent economic recession and recovery on health spending at the state level. According to this analysis, these factors affected overall annual growth in state health spending and the payers and programs that paid for that care. They did not, however, substantially change state rankings based on per capita spending levels over the period.

The State Health Expenditure Accounts produced by the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary provide insight into the diverse patterns of health spending in the states. Because they offer a multidimensional picture of health sector trends at the level at which health care is provided and consumed, they are widely used and cited in research. Additionally, data on state health expenditures can serve as a baseline for state- and national-level policy discussions in the context of health-sector reform. This article presents key highlights from the latest update of the data set, which now extends from 1991 through 2014.

Several developments that are important to the health sector occurred in the most recent historical period (2010–14) and have been previously discussed in the context of national health spending.<sup>1</sup> The most comprehensive was the implementation of the Affordable Care Act (ACA), which included a major expansion of health insurance coverage through Medicaid<sup>2</sup> and private

health insurance Marketplaces in 2014. The period was also strongly influenced by the most recent economic recession and extended modest recovery, which had a dampening effect on private health insurance spending growth. Finally, the oldest members of the baby-boom generation reached Medicare eligibility starting in 2011—a development that has increased Medicare enrollment growth and has also changed the age mix within the Medicare population.

As was the case with the results at the national level, this study finds that the state-level impacts of these recent developments tend to be more evident in underlying spending trends by payer, rather than in aggregated personal health care spending trends. Consequently, the state rankings based on per capita spending levels did not change substantially between 2009 and 2014. However, annual growth in personal health care spending by payer varied by state depending on how a state implemented the ACA coverage expansions and the extent to which the recession and recovery affected states differentially. In addition, the full effect of the ACA coverage

**David Lassman** (David.Lassman2@cms.hhs.gov) is a statistician in the Office of the Actuary, Centers for Medicare and Medicaid Services (CMS), in Baltimore, Maryland.

**Andrea M. Sisko** is an economist in the CMS Office of the Actuary.

**Aaron Catlin** is a deputy director of the National Health Statistics group in the CMS Office of the Actuary.

**Mary Carol Barron** is an economist in the CMS Office of the Actuary.

**Joseph Benson** is an economist in the CMS Office of the Actuary.

**Gigi A. Cuckler** is an economist in the CMS Office of the Actuary.

**Micah Hartman** is a statistician in the CMS Office of the Actuary.

**Anne B. Martin** is an economist in the CMS Office of the Actuary.

**Lekha Whittle** is an economist in the CMS Office of the Actuary.



expansions on insurance coverage and health spending extended beyond 2014;<sup>1,3</sup> accordingly, only the first-year impacts are assessed with these data at the state level.

### Study Data And Methods

The State Health Expenditure Accounts are a subcomponent of the National Health Expenditure Accounts (NHEA), the official government estimates of health spending in the United States. These state-level estimates are derived with consistent data sources and methods in accordance with the NHEA classification and methodological framework, and they are comprehensive over the time period covered—features that allow for analysis of state-specific trends over time.

State health expenditures are measured at the personal health care level, which reflects all health care goods and services consumed but excludes other components of national health care expenditures, such as government administrative costs, the net cost of private health insurance, government public health activity, and investment (including investment in structures and equipment and noncommercial research). The state health expenditure data also include estimates of Medicare, Medicaid, and private health insurance spending. Other payers and programs, including out-of-pocket payments by households, are included in the estimates of total personal health care by state but are not estimated separately.

The estimates are derived in a largely top-down fashion and in two main steps. First, total spending for personal health care from the most recent historical NHEA is disaggregated by state using the quinquennial Economic Census Geographic Area Series and other state-level data sources that capture or proxy health spending provided within a given state.<sup>4</sup> For the major payers of health care (Medicare, Medicaid, and private health insurance), program, survey, and plan cost data are used to allocate spending for each category by state.<sup>4</sup>

Because most of these estimates capture health care provided within each state, including services rendered to both state residents and non-residents, the second step of this method reallocates spending to the state residence of the patient (where applicable), to permit comparisons of per capita health spending across states.<sup>4</sup> Medicare fee-for-service claims, private hospital inpatient discharges, and private physician claims are the key data sources used to measure and adjust for interstate flows of health spending.<sup>4</sup> Because of data limitations, the State Health Expenditures Accounts comprise health

spending incurred within the United States only, by both US residents and non-US residents. Finally, the US census resident population does not include an adjustment for the population undercount by state—an exclusion that results in slightly inflated per capita spending, but this overstatement does not materially affect the findings.

This analysis of State Health Expenditure Accounts data employs both descriptive and multivariate regression-based approaches. The models provide further context for the key state-level demographic, macroeconomic, health status, and health care market factors affecting per capita personal health care spending levels by state.<sup>5,6</sup> These factors are discussed in the context of this study's major findings.

### Study Results

**KEY TRENDS BY STATE** In 2014, state-level per capita personal health care spending ranged from \$5,982 in Utah to \$11,064 in Alaska—a nearly twofold difference (Exhibit 1).<sup>7</sup> Compared to the national average (\$8,045), per capita spending in Alaska was 38 percent higher, while spending in Utah was about 26 percent lower; they have been the lowest and highest, respectively, since 2012. From a regional perspective, states with spending that is higher than the national average tend to be located in the New England, Mideast, Great Lakes, and Plains regions (Exhibit 2). Variation in per capita personal health care spending by state tends to be associated with several factors. States that have relatively higher levels of personal income per capita, greater percentages of the population enrolled in Medicare or Medicaid, and more health care capacity tend to have relatively higher levels of health spending per capita.<sup>6</sup> On the other hand, states that have relatively higher rates of uninsurance tend to have relatively lower levels of health spending per capita.<sup>6</sup>

Over the period 2010–14, growth in per capita personal health care spending ranged from an average of 4.8 percent per year in Alaska to 1.9 percent per year in Arizona (Exhibit 1).<sup>8</sup> The national average growth rate during these years was 3.1 percent. In addition, there was clearly wide variation among the states between per capita spending levels and growth rates for 2010–14. For example, Massachusetts and Connecticut were among the states with the highest per capita spending levels, but their average annual growth rates in per capita spending for 2010–14 were among the lowest at 2.8 percent and 3.6 percent per year, respectively. In contrast, Georgia and Idaho exhibited per capita spending levels that were among the lowest

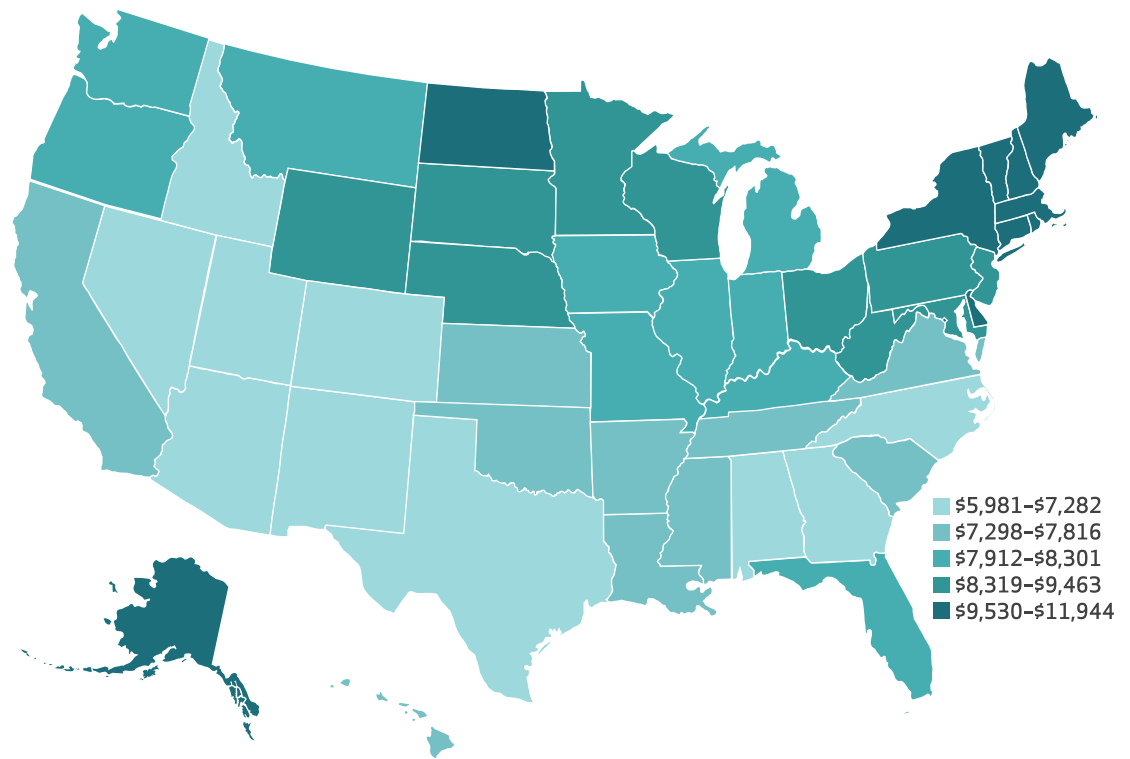
**EXHIBIT 1**
**Per capita personal health care spending and average annual changes in selected time periods, by region and state of residence, 2004-14**

Region	State	Personal health care spending			Average annual change		
		2009	2013	2014	2004-9	2010-13	2014
United States		\$ 6,892	\$ 7,703	\$ 8,045	5.2%	2.8%	4.4%
New England	Connecticut	8,740	9,517	9,859	5.8	2.2	3.6
	Maine	8,359	9,133	9,531	5.4	2.2	4.4
	Massachusetts	9,417	10,273	10,559	6.1	2.2	2.8
	New Hampshire	8,134	9,369	9,589	7.6	3.6	2.4
	Rhode Island	8,393	9,160	9,551	5.7	2.2	4.3
	Vermont	8,111	9,919	10,190	5.9	5.2	2.7
Mideast	Delaware	8,405	9,766	10,254	5.3	3.8	5.0
	District of Columbia	10,439	11,466	11,944	5.3	2.4	4.2
	Maryland	7,507	8,250	8,602	5.7	2.4	4.3
	New Jersey	7,727	8,444	8,859	5.3	2.2	4.9
	New York	8,542	9,351	9,778	5.0	2.3	4.6
	Pennsylvania	7,701	8,877	9,258	4.8	3.6	4.3
Great Lakes	Illinois	6,917	7,911	8,262	5.3	3.4	4.4
	Indiana	6,791	7,923	8,300	5.1	3.9	4.8
	Michigan	6,816	7,745	8,055	5.8	3.2	4.0
	Ohio	7,322	8,286	8,712	5.1	3.1	5.1
	Wisconsin	7,512	8,189	8,702	5.6	2.2	6.3
Plains	Iowa	6,946	7,806	8,200	4.9	3.0	5.1
	Kansas	6,764	7,429	7,651	4.7	2.4	3.0
	Minnesota	7,521	8,465	8,871	4.8	3.0	4.8
	Missouri	6,902	7,860	8,107	4.9	3.3	3.1
	Nebraska	7,193	8,133	8,412	5.5	3.1	3.4
	North Dakota	7,919	9,385	9,851	6.2	4.3	5.0
	South Dakota	7,335	8,547	8,933	6.0	3.9	4.5
Southeast	Alabama	6,325	6,996	7,281	4.0	2.6	4.1
	Arkansas	6,238	6,929	7,408	5.1	2.7	6.9
	Florida	7,134	7,688	8,076	5.0	1.9	5.0
	Georgia	5,513	6,249	6,587	4.0	3.2	5.4
	Kentucky	6,698	7,543	8,004	4.7	3.0	6.1
	Louisiana	6,958	7,487	7,815	6.0	1.8	4.4
	Mississippi	6,615	7,362	7,646	5.8	2.7	3.8
	North Carolina	6,533	7,027	7,264	4.9	1.8	3.4
	South Carolina	6,363	7,020	7,311	4.7	2.5	4.1
	Tennessee	6,499	7,106	7,372	4.1	2.3	3.8
	Virginia	6,452	7,306	7,556	6.0	3.2	3.4
West Virginia	7,772	8,969	9,462	5.5	3.6	5.5	
Southwest	Arizona	5,874	6,262	6,452	6.3	1.6	3.0
	New Mexico	6,214	6,860	7,214	6.7	2.5	5.2
	Oklahoma	6,504	7,293	7,627	5.4	2.9	4.6
	Texas	6,004	6,661	6,998	5.1	2.6	5.1
Rocky Mountains	Colorado	5,882	6,472	6,804	4.3	2.4	5.1
	Idaho	5,700	6,593	6,927	5.0	3.7	5.1
	Montana	6,701	7,994	8,221	5.7	4.5	2.8
	Utah	5,101	5,658	5,982	4.8	2.6	5.7
	Wyoming	6,972	7,961	8,320	5.7	3.4	4.5
Far West	Alaska	8,745	10,428	11,064	6.2	4.5	6.1
	California	6,210	7,256	7,549	5.6	4.0	4.0
	Hawaii	6,542	6,955	7,299	5.5	1.5	5.0
	Nevada	5,700	6,275	6,714	4.4	2.4	7.0
	Oregon	6,484	7,467	8,044	5.6	3.6	7.7
	Washington	6,838	7,609	7,913	5.8	2.7	4.0

**SOURCES** Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; and Census Bureau.

## EXHIBIT 2

Per capita personal health care spending by state of residence, calendar year 2014



**SOURCES** Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; and Census Bureau.

but per capita spending growth rates for 2010–14 that were among the highest.

The magnitude of the variation in per capita personal health spending levels across the states, measured as the ratio between the maximum and minimum per capita health spending levels, has remained relatively stable since 2009 at 1.8–1.9 (Exhibit 1). Relatively few states experienced average annual growth over the 2010–14 period that resulted in a large change in their rankings within the per capita spending distribution (data not shown). Oregon experienced the largest upward change in per capita spending rankings (from 37th to 28th during the period) with an average annual per capita spending growth rate of 4.4 percent that was the fourth-fastest over the period. Conversely, Louisiana (from 22nd to 31st) and North Carolina (from 34th to 42nd) experienced reductions in their rankings resulting from average annual per capita spending growth rates that were among the five slowest during 2010–14.

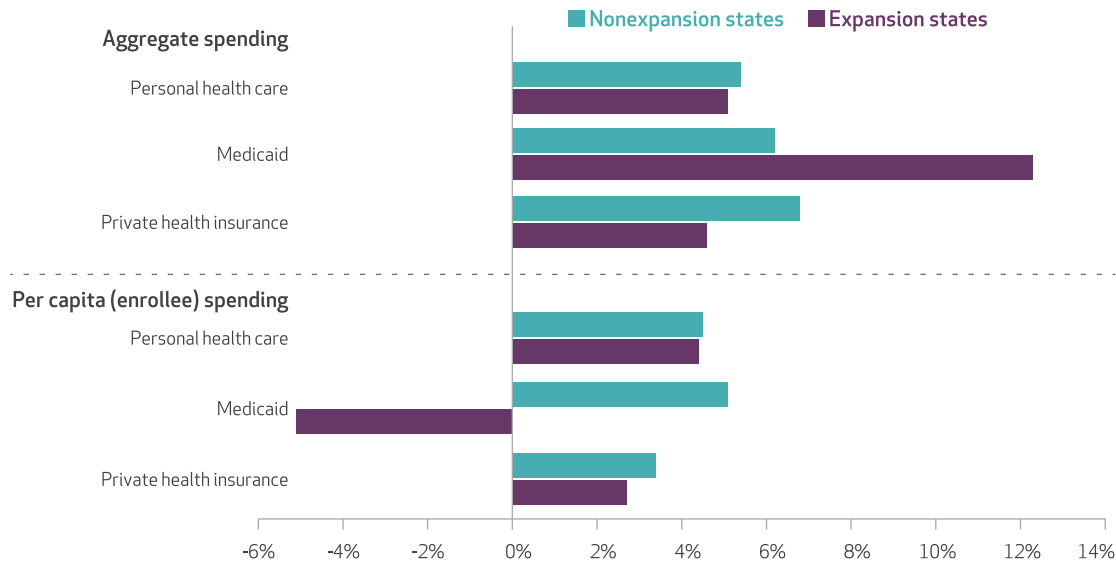
**IMPACT OF THE FIRST YEAR OF COVERAGE EXPANSIONS** The coverage expansions under the Affordable Care Act went into full effect in 2014; they were the main reason for the reduction in the uninsured by nearly nine million

people that year.<sup>1</sup> Twenty-six states and the District of Columbia chose to expand eligibility for their Medicaid programs,<sup>2</sup> increasing enrollment by 6.3 million adults in 2014. In addition, the federal and state Marketplaces offered individuals private health insurance plans for direct purchase in all states, and the majority of the enrollees in those plans received advanced premium tax credits and cost-sharing reductions. On net, private health insurance enrollment increased by 4.7 million in 2014. States that expanded Medicaid accounted for over half (5.6 million) of the total reduction in the number of uninsured people in 2014.

Most states experienced some acceleration in per capita personal health care spending growth from 2013 to 2014, in part because of the coverage expansions through Medicaid and the Marketplaces. However, growth rates for this spending in Medicaid expansion and nonexpansion states were similar, at 4.4 percent and 4.5 percent, respectively (Exhibit 3). Of the twenty-six states that experienced per capita spending growth above the national average, fourteen expanded their Medicaid programs. States with per capita spending growth rates below the national average were nearly evenly split between

**EXHIBIT 3**

**Growth in personal health care, Medicaid, and private health insurance spending from 2013 to 2014, by Medicaid expansion status as of December 31, 2014**



**SOURCES** Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; and Census Bureau.

Medicaid expansion (eleven states and the District of Columbia) and nonexpansion (thirteen states). The similarity in aggregate per capita spending growth in expansion and nonexpansion states in 2014 is a result of two key effects: faster growth in utilization in expansion states relative to nonexpansion states because of larger increases in percentage insured in expansion states, and faster growth in spending per insured person in nonexpansion states relative to expansion states.

State-specific impacts of the ACA coverage expansions are most evident in the underlying trends for Medicaid and private health insurance spending by state. In states that expanded coverage, total Medicaid spending increased 12.3 percent from 2013 to 2014, compared with 6.2 percent in states that did not expand Medicaid (Exhibit 3). Per enrollee<sup>9</sup> Medicaid spending, however, declined considerably in expansion states (-5.1 percent) in 2014 but increased 5.1 percent in nonexpansion states. Trends in per enrollee Medicaid spending can be attributed to the coverage expansion, which increased the share of relatively less expensive enrollees relative to the previous Medicaid beneficiary population mix in expansion states (data not shown). Adult enrollees, whose per enrollee spending is 70 percent lower than spending for disabled enrollees and 62 percent lower than spending for aged enrollees,<sup>10</sup> accounted for just 17 percent of total Medicaid enrollment in nonexpansion states but 43 percent in states that

expanded coverage (up from 32 percent in 2013).<sup>9</sup> In contrast, the more costly disabled enrollees accounted for 30 percent of total Medicaid enrollment in nonexpansion states and just 20 percent in expansion states in 2014.<sup>9</sup> Children—the least costly eligibility group—had per enrollee spending that was 43 percent lower than that of the adult expansion population and represented a much higher share of total enrollment in nonexpansion states (53 percent) than in expansion states (37 percent) in 2014.<sup>9,10</sup>

For private health insurance, however, aggregate spending grew more rapidly in states that did not expand Medicaid eligibility by 2014 than in states that did, at rates of 6.8 percent and 4.6 percent, respectively (Exhibit 3). A majority of this difference reflects faster private health insurance enrollment growth in nonexpansion states (3.2 percent) compared to that for expansion states (1.9 percent) (data not shown). This more rapid growth was caused, in part, by enrollment in Marketplace plans, as nonexpansion states accounted for 53.4 percent of Marketplace enrollment but 45.5 percent of overall private health insurance enrollment in 2014. Per enrollee, the growth rate for private health insurance spending in 2014 also increased more rapidly for nonexpansion states (3.4 percent) than for expansion states (2.7 percent) (Exhibit 3). This faster growth was partially attributable to per person spending for enrollees in the Marketplaces that was higher than spending for

non-Marketplace individual coverage.<sup>11</sup>

From a distributional perspective, between 2013 and 2014 there were relatively minor changes in the variation in total per capita personal health care spending levels, as well as in the rankings of states by those spending levels. The growth rate in per capita personal health care spending in 2014 was highest in Oregon (7.7 percent) and lowest in New Hampshire (2.4 percent)—a threefold difference that was consistent with the ratio observed for Vermont and Hawaii, the states with the highest and lowest per capita spending growth during the 2010–13 period (Exhibit 1). Of particular interest regarding Oregon and New Hampshire, however, is that both expanded Medicaid in 2014, which suggests that other factors also contributed to the relative differences in growth rates. For Oregon, the high per capita growth is attributed to very high total Medicaid spending and enrollment growth rates (46.9 percent and 53.8 percent, respectively), as well as strong spending growth rates for aggregate hospital services (10.1 percent) and retail prescription drugs and other nondurable medical products (13.2 percent) (data not shown). The low growth in New Hampshire is due to that state's midyear expansion of Medicaid and slower spending growth rates for aggregate hospital services (3.1 percent), physician and clinical services (2.9 percent), and retail prescription drugs and non-durable medical products (6.4 percent) (data not shown).

**IMPACT OF THE RECESSION AND RECOVERY** The most recent economic recession, which ended in 2009, and the subsequent modest rate of recovery had a substantial and sustained effect on health spending and health insurance coverage in the years that followed.<sup>12</sup> For 2010–13, per capita personal health spending grew at a rate of 2.8 percent per year, on average—substantially slower than 5.2 percent per year, on average, for 2004–09 (Exhibit 1). Loss of employment and related loss of income and private health insurance coverage led to faster growth in Medicaid enrollment and in the number of uninsured people.<sup>13</sup>

During 2010–13, the average deceleration across the states was 2.3 percentage points compared to the 2004–09 period, and every state experienced a deceleration in per capita spending growth of at least 0.8 percentage point (Exhibit 1). Vermont experienced the fastest per capita spending growth rate over the 2010–13 period (5.2 percent per year), though this represented a 0.8-percentage-point deceleration compared to the prior period. The growth rate was lowest in Hawaii, at 1.5 percent per year, 3.9 percentage points slower than in the

## During 2010–13, every state experienced a deceleration in per capita spending growth compared to the 2004–09 period.

prior period. Arizona experienced the largest deceleration in growth (4.7 percentage points).

At the national level, a strong relationship between income and health spending has been consistently observed, which points to cyclical factors underlying the slowdown in health care spending growth.<sup>14</sup> In line with these findings, regression analysis of per capita personal health care spending at the state level also suggests a strong positive relationship between that spending and per capita income. Moreover, regional patterns in income alone explained nearly 60 percent of the variation in personal health care spending by state over the period 1991–2014 (they explained more than 80 percent if a time trend was also considered as part of the model specification).<sup>6</sup> Further, in the period following the most recent recession, incremental annual regression analysis showed that economic factors such as per capita personal income and the uninsurance rate by state (which are both closely tied to regional unemployment rates) became more significant and explained an increasing share of the variation in health spending.<sup>6</sup>

As a result, regions that experienced the largest slowdowns in average personal income per capita by state also experienced some of the largest slowdowns in personal health care spending per capita during the recession, and vice versa as the economy began to recover. From 2007 to 2009, the regions with the largest decelerations in per capita personal income growth (Far West and Rocky Mountains) also experienced the most significant slowdowns in per capita personal health care spending growth (Exhibit 4). From 2009 to 2013, however, the opposite was true, as the Far West and Rocky Mountains experienced the fastest acceleration in per capita income growth and were the regions with the smallest deceleration in per capita health spending growth. California (in the Far West) experienced the fifth-highest average annual growth rate in per capita personal health care spending over the

2010–13 period (4.0 percent) and the sixth-highest average annual growth rate in per capita personal income (3.8 percent). As a result, California had one of the largest changes in the per capita ranking (from 43rd in 2009 to 36th in 2013) (data not shown).

Conversely, the New England, Mideast, and Southeast regions experienced the slowest per capita personal income growth during 2010–13, and they were the slowest-growing regions in per capita personal health care spending. Of note in these regions were Massachusetts, New York, and Florida—the states with the most total spending in these respective regions—all of which were among the slowest growing in per capita personal health care spending and all of which experienced some reduction in their per capita spending rankings over this period (data not shown).

**MEDICARE SPENDING** Unlike private health insurance and Medicaid, Medicare coverage was not affected by the ACA coverage expansions in 2014 and was likely less affected by the recession because of its universal coverage based on eligibility requirements.<sup>15</sup> US average Medicare per enrollee spending was \$10,986 in 2014 (Exhibit 5). This spending was highest in New Jersey at \$12,614 (15 percent higher than the national average), while it was lowest in Montana at \$8,238 (25 percent below the US average). Thus, spending per enrollee varied by 53 percent between the highest- and lowest-spending states, a narrower range than in 2009 (when there was a 60 percent difference). According to published research, factors influencing the variation in Medicare spending include the average age of the population; health status; relative cost of living; and differences in socioeconomic status, demographic characteristics, and provider practice patterns.<sup>16,17</sup>

During 2010–14, Medicare spending per enrollee increased at an average annual rate of 1.2 percent across the United States (Exhibit 5). North and South Dakota had the highest increases in average per enrollee Medicare spending growth rates at 4.1 percent and 3.1 percent per year, respectively. This growth caused per enrollee Medicare spending for North Dakota to rise in ranking from 48th highest in 2009 to 35th highest in 2014 (\$9,461), and it caused such spending for South Dakota to increase from 46th highest to 39th highest (\$9,315). For both states, growth in per enrollee Medicare hospital spending was strong from 2010 to 2014, increasing at rates of 5.7 and 4.6 percent, respectively, compared with just 0.3 percent nationally (data not shown). In no other state was this growth rate above 2.8 percent per year during this time period.

#### EXHIBIT 4

Per capita personal health care spending and personal income, by region, level and growth rate, calendar years 2007, 2009, and 2013

Region	Personal health care spending			Personal income		
	2007	2009	2013	2007	2009	2013
United States	\$6,370	\$6,892	\$7,703	\$39,821	\$39,376	\$44,493
New England	8,087	8,903	9,807	49,201	50,537	55,517
Mideast	7,468	8,068	8,964	46,178	46,227	52,227
Great Lakes	6,488	7,051	8,005	37,187	36,826	42,054
Plains	6,593	7,126	8,054	37,896	38,560	44,380
Southeast	6,097	6,572	7,232	36,259	35,595	39,066
Southwest	5,540	6,043	6,666	36,050	35,779	41,706
Rocky Mountains	5,415	5,790	6,493	37,760	36,244	42,154
Far West	5,856	6,327	7,302	42,793	41,414	47,259

Region	Growth from prior period shown <sup>a</sup>					
	2007	2009	2013	2007	2009	2013
United States	6.4%	4.0%	2.8%	3.8%	-0.6%	3.1%
New England	7.1	4.9	2.4	4.0	1.3	2.4
Mideast	6.4	3.9	2.7	4.0	0.1	3.1
Great Lakes	6.6	4.3	3.2	3.0	-0.5	3.4
Plains	6.3	4.0	3.1	3.9	0.9	3.6
Southeast	6.1	3.8	2.4	4.1	-0.9	2.4
Southwest	6.4	4.4	2.5	4.2	-0.4	3.9
Rocky Mountains	6.2	3.4	2.9	3.8	-2.0	3.8
Far West	7.0	3.9	3.6	4.0	-1.6	3.4

**SOURCES** Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; Census Bureau; and Bureau of Economic Analysis as of March 2017. <sup>a</sup>Growth for 2007 is average annual rate change from 2000.

Louisiana had the slowest annual average growth rate in per enrollee Medicare spending during 2010–14 at just 0.2 percent—nearly a percentage point slower than the national average (Exhibit 5). As a result, Louisiana’s ranking based on per enrollee Medicare spending fell from the 3rd highest level in 2009 to the 9th highest in 2014 (when it amounted to \$11,811). While the growth in per enrollee Medicare spending for physician and clinical services and hospital services in Louisiana was slow during this time period, also contributing was a 3.4 percent decline in the state’s per enrollee home health care spending from 2010 to 2014 compared with a 0.5 percent decline in national home health care spending during these years (data not shown).

Nationally, for 2012–13, Medicare per enrollee spending experienced slow growth that can be partly attributed to a combination of payment reductions and policies put in place by the Affordable Care Act and budget sequestration.<sup>12</sup> This was also the period when the first baby boomers became eligible for Medicare; accordingly, enrollment increased at relatively faster rates, and per enrollee Medicare spending in-

## EXHIBIT 5

Per enrollee Medicare, Medicaid, and private health insurance (PHI) personal health care spending and average annual percentage change, by region and state of residence, calendar year 2014

Region	State	Personal health care spending			Average annual change, 2010-14		
		Medicare	Medicaid	PHI	Medicare	Medicaid	PHI
United States		\$10,986	\$ 6,815	\$4,551	1.2%	0.0%	3.3%
New England	Connecticut	11,964	8,058	5,187	1.6	-5.7	2.5
	Maine	9,325	7,504	5,015	1.5	-1.1	4.2
	Massachusetts	11,899	8,922	5,302	1.2	-5.6	3.9
	New Hampshire	9,397	9,129	4,880	1.8	-2.3	1.3
	Rhode Island	10,901	10,934	4,620	1.5	0.2	1.6
	Vermont	9,231	7,917	5,313	1.7	2.4	3.9
Mideast	Delaware	11,460	6,921	4,806	2.0	1.1	2.7
	Dist. of Columbia	11,814	8,998	8,831	1.0	-3.4	2.8
	Maryland	12,000	7,677	4,343	1.1	-1.9	2.4
	New Jersey	12,614	8,049	5,081	1.2	-5.4	5.2
	New York	12,179	9,803	5,338	1.0	-1.5	3.3
	Pennsylvania	11,243	9,407	4,634	1.2	3.2	4.2
Great Lakes	Illinois	11,116	4,959	4,875	1.0	-3.5	2.9
	Indiana	10,714	8,285	4,078	1.8	5.7	2.0
	Michigan	11,318	5,915	3,950	0.8	1.4	0.4
	Ohio	11,038	7,007	4,371	1.4	-1.1	3.5
	Wisconsin	9,608	7,057	5,159	1.7	0.1	2.1
Plains	Iowa	9,317	6,702	4,076	2.3	-0.5	2.1
	Kansas	10,126	6,736	4,855	1.7	-3.3	6.9
	Minnesota	9,917	9,176	4,603	2.2	-1.3	3.7
	Missouri	10,457	9,413	4,354	1.6	1.6	2.8
	Nebraska	9,956	7,964	4,536	2.0	-0.5	4.0
	North Dakota	9,461	12,413	4,410	4.1	5.1	4.2
	South Dakota	9,315	7,056	4,335	3.1	0.4	4.1
Southeast	Alabama	10,267	5,042	3,641	1.1	-0.4	0.9
	Arkansas	9,479	6,108	3,906	1.3	1.0	3.1
	Florida	12,229	5,175	4,606	0.5	-0.7	4.0
	Georgia	10,429	5,199	4,406	1.2	1.9	4.0
	Kentucky	10,368	7,016	4,551	1.6	-0.2	2.8
	Louisiana	11,811	6,281	4,420	0.2	-0.1	4.2
	Mississippi	11,021	6,690	4,045	0.7	2.8	3.2
	North Carolina	10,260	7,225	3,859	1.1	-0.6	0.4
	South Carolina	10,298	5,491	4,235	1.4	-3.3	3.0
	Tennessee	10,371	5,677	4,680	0.7	2.3	4.3
	Virginia	9,677	7,361	4,218	2.1	1.0	4.8
West Virginia	10,268	6,557	3,917	2.1	-0.8	2.7	
Southwest	Arizona	10,096	6,032	4,035	1.4	1.5	2.1
	New Mexico	8,663	5,445	4,155	1.3	-2.9	3.4
	Oklahoma	10,429	6,529	3,878	1.0	1.2	2.3
	Texas	11,895	7,273	4,696	0.7	2.1	4.1
Rocky Mtn.	Colorado	9,287	7,143	4,623	1.3	0.5	4.4
	Idaho	8,737	7,069	3,560	2.3	0.0	2.5
	Montana	8,238	9,378	3,882	2.1	-0.4	4.5
	Utah	9,084	6,484	3,657	1.8	-0.8	3.9
	Wyoming	9,050	7,698	4,957	2.5	-0.7	3.4
Far West	Alaska	9,288	12,001	5,958	1.5	1.2	3.5
	California	11,833	5,368	4,735	1.5	3.5	4.6
	Hawaii	8,592	6,087	4,222	2.2	2.2	3.0
	Nevada	10,796	5,484	3,417	2.1	-1.5	-3.6
	Oregon	8,942	7,185	4,232	1.6	-1.3	0.8
	Washington	8,997	5,851	4,328	1.3	-0.2	1.4

SOURCES Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; and Census Bureau.

# The ratio between the maximum and minimum per capita spending levels remained virtually unchanged during 2009–14.

creased at modest rates, as the average age of the Medicare population became younger. Per enrollee Medicare spending increased at a rate of 0.3 percent nationally over the period 2012–13, with eleven states experiencing negative per enrollee Medicare growth rates during these years (Louisiana had the lowest at –1.5 percent) and only two states (North Dakota and Montana) experiencing growth rates above 2 percent (data not shown).

For 2014, faster growth in Medicare per enrollee spending was affected in part by increased use of prescription drugs, which was attributable to the use of expensive specialty drugs, including those used to treat hepatitis C.<sup>12</sup> Per enrollee Medicare spending growth rates for prescription drugs and other nondurable medical products increased, on average, 10 percent nationally, with growth rates above 15 percent in Colorado, Maryland, and South Carolina (data not shown).

## Conclusion

The health sector experienced substantial change during the period 2010–14. Concurrent with the lagged impact of a severe recession and extended modest recovery, the enactment and implementation of comprehensive health reform legislation affected not only coverage for health care but also its financing and delivery. Additionally, the baby-boom generation began to enroll in Medicare—a notable demographic shift both for the nation as a whole and for the Medicare population itself.

As we have demonstrated, by using data from the State Health Expenditure Accounts to compare state-specific trends for overall personal health care spending and for spending by the major health care payers, it is possible to evaluate how state-level total and per person spending, spending growth, and measures of spending variation changed from 2009 through 2014. Over this period, clear state-specific impacts can be observed with regard to amounts of spending by payer and rates of spending growth because of economic and health-sector factors. Still, despite significant effects on the availability of, and enrollment in, health insurance and on the resources devoted to health care, the variation in overall health care spending by state, measured as the ratio between maximum and minimum per capita health spending levels, remained virtually unchanged during these years. As a result, there was minimal movement in the relative rankings of overall per capita health spending by state.

Notably, however, this article covers only the first-year impacts of the Affordable Care Act coverage expansions. Future vintages of state health expenditure data will permit further evaluation of state-level health spending experiences beyond 2014, as coverage continues to expand and economic factors continue to evolve. ■

The opinions expressed here are the authors' and not necessarily those of the Centers for Medicare and Medicaid

Services. The authors thank Catherine Curtis, Stephen Heffler, John Poisal, Paul Spitalnic, Christopher Truffer, and

anonymous peer reviewers for their helpful comments. [Published online June 14, 2017.]

## NOTES

1 Martin AB, Hartman M, Washington B, Catlin A, National Health Expenditure Accounts Team. National health spending: faster growth in 2015 as coverage expands and utilization increases. *Health Aff (Millwood)*. 2017;36(1):166–76.

2 States that had expanded Medicaid coverage through the ACA by the end of 2014: Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Hawaii, Illinois, Iowa, Kentucky, Maryland,

Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, Nevada, New Mexico, New York, North Dakota, Ohio, Oregon, Rhode Island, Vermont, Washington, and West Virginia.

3 Keehan SP, Stone DA, Poisal JA, Cuckler GA, Sisko AM, Smith SD, et al. National health expenditure projections, 2016–25: price increases, aging push sector to 20 percent of economy. *Health Aff (Millwood)*. 2017;36(3):553–63.

4 Centers for Medicare and Medicaid Services. State Health Expenditure Accounts: methodology paper, 1980–2014. Definitions, sources, and methods [Internet]. Baltimore (MD): CMS; 2017 [cited 2017 Jun 14]. Available from: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/State-DSM-14.pdf>

5 Cuckler G, Sisko A. Modeling per capita state health expenditure vari-



- ation: state-level characteristics matter. *Medicare Medicaid Res Rev.* 2013;3(4):E1–21.
- 6 Centers for Medicare and Medicaid Services. Econometric analysis of state health expenditures: methodology and model specification [Internet]. Baltimore (MD). CMS; 2017 [cited 2017 Jun 14]. Available from: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/State-Model-14.pdf>
  - 7 Because spending within the District of Columbia tends to be an outlier compared to the states, it is excluded from our descriptive and econometric analysis of health spending variation. For more information, see Cuckler G, Martin A, Whittle L, Heffler S, Sisko A, Lassman D, et al. Health spending by state of residence, 1991–2009. *Medicare Medicaid Res Rev.* 2011;1(4):E1–31.
  - 8 These growth rates are calculated based on the spending level of the prior year shown in the exhibits. For example, the 2010–14 growth rate for Alaska is based on the 2014 and 2009 levels. This captures the growth that occurred for all years in the 2010–14 period.
  - 9 Medicaid enrollment is based on unpublished analysis by the CMS Office of the Actuary of data from the Medicaid Analytical eXtract (MAX) for the nonexpansion population and from the CMS-64 Quarterly Expense Reports for the expansion population; enrollment was estimated for the nonexpansion population when MAX data were not available.
  - 10 Truffer CJ, Wolfe CJ, Rennie KE. 2016 actuarial report on the financial outlook for Medicaid [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; 2016 [cited 2017 May 10]. Available from: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/MedicaidReport2016.pdf>
  - 11 Blue Cross Blue Shield. Newly enrolled members in the individual health insurance market after health care reform: the experience from 2014 and 2015 [Internet]. Chicago (IL): Blue Health Intelligence; 2016 Mar 20 [cited 2017 May 10]. Available from: <https://www.bcbs.com/about-us/capabilities-initiatives/health-america/health-of-america-report/newly-enrolled-members>
  - 12 Martin AB, Hartman M, Benson J, Catlin A, National Health Expenditure Accounts Team. National health spending in 2014: faster growth driven by coverage expansion and prescription drug spending. *Health Aff (Millwood)*. 2016;35(1):150–60.
  - 13 Martin A, Lassman D, Whittle L, Catlin A, National Health Expenditure Accounts Team. Recession contributes to slowest annual rate of increase in health spending in five decades. *Health Aff (Millwood)*. 2011;30(1):11–22.
  - 14 Centers for Medicare and Medicaid Services. Projections of national health expenditures: methodology and model specification [Internet]. Baltimore (MD): CMS; 2017 Feb 15 [cited 2017 May 10]. Available from: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/ProjectionsMethodology.pdf>
  - 15 Dranove D, Garthwaite C, Ody C. The economic downturn and its lingering effects reduced medicare spending growth by \$4 billion in 2009–12. *Health Aff (Millwood)*. 2015;34(8):1368–75.
  - 16 Cassidy A. Health Policy Brief: Geographic variation in Medicare spending. *Health Affairs* [serial on the Internet]. 2014 Mar 6 [cited 2017 Jun 2]. Available from: [http://www.healthaffairs.org/healthpolicy/briefs/brief.php?brief\\_id=109](http://www.healthaffairs.org/healthpolicy/briefs/brief.php?brief_id=109)
  - 17 Tsugawa Y, Jha AK, Newhouse JP, Zaslavsky AM, Jena AB. Variation in physician spending and association with patient outcomes. *JAMA Intern Med.* 2017;177(5):675–82.

# How We Spend \$3,400,000,000,000

Why more than half of America's healthcare spending goes to five percent of patients



Elaina Natario / Katie Martin / The Atlantic

- [T.R. Reid](#)
- Jun 15, 2017
- [Health](#)

Last year, America's total medical costs hit a new record of \$3.4 trillion, according to the federal government. That's about 18 percent of the country's total GDP, meaning that one out of every six dollars we spent in 2016 went to health care. The national doctor bill dwarfs anything else we spend money on, including food, clothing, housing, or even our mighty military.

If that \$3.4 trillion were spread equally throughout the population, the bill would come to some \$10,350 for every man, woman and child in the country. But fortunately—for most of us, anyway—the cost of health care is not equally distributed. Rather, a small number of Americans run up most of the expense. The biggest medical costs are concentrated on a fairly small segment of the population—people with one or more chronic illnesses, plus victims of accidents or violent crime. The cost is so concentrated, in fact, that an estimated five percent of the population accounts for 50 percent of total medical costs.

For the purposes of this project, we're calling these people The Platinum Patients—they've also been described as “super-utilizers” or “frequent fliers.”



**Each year, 1 in every 20 Americans racks up just as much in medical bills as another 19 combined. This critical five percent of the U.S. population is key to solving the nation's health care spending crisis.**

[Read more](#)

This concentration of total cost on a small segment of the total population is reflected in another common aspect of medical spending: the concentration of treatment, and cost, in the end of a life span. For most people, the vast majority of all the health care they'll ever get comes near the hour of death. Hundreds of billions of dollars each year are spent treating Americans who are in the last weeks, or days, of life.

The old Marx Brothers' joke—"I wouldn't dare go to the hospital—people die there all the time"—is essentially true. Many people die in the hospital—in many cases, just after they've incurred a hugely expensive round of surgery, treatment, and medication. About one-third of Americans undergo operations in the last month of life.

If these issues were subject to hard, cold economic theory, a health-care system would probably distribute spending differently. The large sums it costs to keep a sedated cancer patient with dementia alive in a hospital bed from age 94 to 95 could presumably be directed instead to provide, say, a kidney transplant for a 40-something victim of renal failure, or a young woman who is too depressed to care for her baby. That money could be used for pre-natal care for uninsured mothers, setting the stage for both mother and child to have a healthier and happier life. Or, those funds could be used to provide health insurance at reasonable cost to the 29 million Americans who have no health coverage today.

One famous, or perhaps notorious, advocate of limiting late-in-life medical spending is former Colorado Gov. Richard Lamm, who was given the nickname “Governor Gloom” in the 1980’s for his argument that the elderly have a “duty” to avoid costly care when the end is near. There’s only so much money available for medical care, Lamm noted, so it ought to be used in the most efficient way. In the face of bitter criticism, Lamm stuck to his guns. Just this spring he told the Denver Post: “When I look at the literature, and there are such things as \$93,000 prostate operations at some stage of prostate cancer that might give two extra months of life, it is outrageous.”

The problem with these straightforward economic calculations is that they involve real human beings who have friends and relatives. That 94-year-old cancer patient, after all, may have loving children or grandchildren at the bedside; hardly anybody is willing to let Grandpa die just to save money for the overall health-care system.

The issue of allocating medical spending is most acute in the United States, because we spend far more on treatment and medication than any other country. All the other developed democracies on the planet guarantee health care for everybody (citizen or alien), and yet they spend, on average, about half as much per capita as the U.S.

But all over the world, health systems are struggling with the same concentration of cost that plagues the U.S.

“No country...can afford to pay for every advanced surgical procedure and every costly drug that modern medicine knows how to provide.”The United Kingdom is a global leader in dealing with this concern, because the National Health Service provides care—with no medical bills—to 62 million Britons and another 12 million or so resident foreigners. Overall, the NHS works well; the Brits have longer life expectancy, lower infant mortality, and somewhat better health statistics than the U.S., at far less cost. But the British, system, too, is struggling with the enormous expense of treating the chronically ill and the aged.

So Britain created an organization to make rules for how its healthcare money is spent. It’s formally called the National Institute for Health and Clinical Excellence, but everyone knows it by its acronym: “NICE.” This outfit issues guidelines to the regional medical authorities on what should be covered, and what shouldn’t. Should a 94-year-old get a hip replacement? Should a terminal cancer patient be given a course of medication that costs \$40,000 and extends life an average of four months? (In Britain, the answers are, generally, “No.”)

In one widely-reported case, the NICE guidelines said that a pub waitress—a mother of three—who contracted breast cancer should not receive the drug Herceptin. After all, NICE noted, the medication costs about \$36,000, and doesn’t usually help with that woman’s particular form of cancer. Since there is only a finite amount of money in the National Health Service budget, the agency said, it would be smarter to spend those thousands on a treating another patient with a better chance of recovery.

As pure economics, this made sense. As politics, it was a disaster. The waitress's case became a national scandal. The tabloid headlines savaged the agency: "Not so NICE—Mum Left to Fight Cancer Without a Pill."

For systems that are looking for smarter ways to allocate limited funds, health-care economists have created a pair of measures to determine which treatments or drugs are worth paying for. The "Quality-Adjusted Life Year," or QALY (pronounced "quolly") and the "Disability-Adjusted Life Year, or DALY ("dolly"), are supposed to steer health-care dollars in the direction that provides the greatest quality of life. These ratings would say, for example, that spending money to keep an aging, asthmatic Alzheimer's patient on life support for 9 months is not as useful as spending the same money for 9 months of pre-natal care for a poor, uninsured mother-to-be.

Americans who are not health-care economists tend to resist the concept of QALYs and DALYs because they lead the system not to pay for one person's health care in order to pay for another's. This is considered "rationing" of health care, and rationing is generally condemned under a variety of names, most memorably as "death panels."

In fact, though, every nation rations health care every day. No country—not even the richest oil sheikdoms—can afford to pay for every advanced surgical procedure and every costly drug that modern medicine knows how to provide. Accordingly, health-care systems are constantly making choices—rationing—about which treatments to pay for.

The United States, too, rations health care. Just ask any of the 29 million uninsured Americans who generally can't see a doctor or pay for a prescription until they're sick enough to go to the emergency room. But the U.S. does its rationing in a different way.

In other rich countries, there's a basic floor of care that everybody gets, which means there's a ceiling as well—the system simply won't pay for certain drugs or procedures. In the U.S., millions of people have no floor except the emergency room, and others have no ceiling. With the right insurance plan, there's almost no limit to what money can buy in American health care, regardless of the age or condition of the patient. And so we continue to spend huge sums on that small, generally elderly segment of the population with chronic illnesses, while millions have no health insurance.

One approach to this quandary that seems promising, both for the individual patient and for the health-care system overall, is the concept of "death with dignity," as reflected in the Hospice movement. Hospice was initially a British idea that has spread to France, the U.S., and other advanced democracies. It's a system that emphasizes caring, not curing, that replaces the all-out battle against death. In essence, the surgeries and the IV tubes and the breathing machines are replaced with a calm acceptance that one's time is coming.

A patient in Hospice avoids the operating room and the hospital ward, spending the final weeks or days of life at home or in a quiet facility, often with a regimen of drugs to control the pain of disease. In the U.S., most of the people who commit to Hospice are elderly, but it's a path that terminally ill patients sometimes choose in their 20's or 30's. For the ailing individual, and for

friends and relatives, it provides a more tranquil opportunity to reflect and say goodbye than the hurly-burly and confusion of a major hospital. For a health-care system, it can be a massive money-saver.

Accordingly, the two big government health-insurance plans, Medicaid and Medicare, both provide payment for hospice services. One section of the Affordable Care Act (“ObamaCare”) says that physicians can now be paid for an office visit in which they discuss end-of-life options such as Hospice; this was the provision that Sarah Palin famously denounced as “death panels.”

Still, most people facing serious illness avoid Hospice and place their bet instead on the marvels of modern medicine. The physical result is often positive; doctors today can cure diseases that were considered terminal just a few years ago. However, the fiscal impact of these miracle cures is increasingly painful for national treasuries.

As other countries have found, there’s no simple solution to the problem of concentrated health-care costs. But one step that could clearly help in the U.S. would be a commitment, at long last, to provide health care for every American. All of the rich countries that guarantee health care for everybody have better health outcomes at much lower cost than the U.S. This is not a coincidence: a comprehensive system of universal care will always be cheaper and more effective than the haphazard, crazy-quilt network of overlapping and costly payment systems America is stuck with today.

And when everybody is covered, the health-care system can probably make fairer decisions about where the money should be spent. If America is going to pay \$3.4 trillion for health care, after all, we ought to make sure that every American benefits from that colossal expenditure.

## Healthcare Systems and Services Practice



# The market evolution of provider-led health plans

Gunjan Khanna, PhD; Deepali Narula; and Neil Rao

# The market evolution of provider-led health plans

*Offering a health plan can give health systems an opportunity for growth, but it is not without financial risk. To benefit from this move, health systems should use a different lens to understand both consumers and risk, know where the best growth opportunities are, rethink their payor-provider interactions, and take advantage of integrated claims and clinical data.*

As U.S. providers adapt their business models in response to the transition from fee-for-service reimbursement to different forms of value-based payment, they are increasingly exploring the benefits of vertical integration. In some cases, they have chosen to offer their own health plans.

Many of the health systems that first took this step focused on the Medicaid market. More recently, health systems have been offering a growing number of Medicare Advantage and public exchange plans. Interest in the exchange market seems to be especially keen. Furthermore, shutdown of 12 of the 23 CO-OPs (Consumer Operated and Oriented Plans) has created a set of exchange enrollees looking for another health plan, and recent losses may cause some large payors to put less emphasis on the exchange market.

Nevertheless, available (although early) financial data suggests that the performance of provider-led health plans (PLHPs) remains mixed in all markets. More than 40 of the 89 PLHPs we analyzed have had negative margins in some or all of the past three years. Empirical data suggests, however, that scale (in terms of the number of lives) can help.

Health systems that are already offering a health plan or are considering adopting this approach must therefore carefully think through how they can take advantage of having an integrated

delivery system. Success will require them to have—or develop—a range of skills. For example, they should be able to use product design to develop products that meet consumers' needs, undertake sophisticated actuarial analyses to price appropriately, and take advantage of integrated claims and clinical data to spot opportunities for better medical management. In addition, they must have a deep knowledge of competitive dynamics to identify regions with strong growth potential and be willing to adopt new administrative approaches to reduce costs.

In this paper, we will review both the growth trajectory and financial performance of PLHPs. In addition, we will discuss the four questions health systems should ask themselves if they are considering offering a PLHP or want to re-evaluate their plan's market differentiation.

## Market growth<sup>1</sup>

Provider ownership of health plans has been increasing steadily. Between 2010 and 2014 (the most recent year for which most data is available), the number of providers offering one or more health plans grew to 106, from 94 (Exhibit 1). Furthermore, many providers expanded into additional lines of business (Exhibit 2). In 2010, only 47 (50%) of the providers owning health plans operated in more than one line of business; four years later, 65 (61%) did. As a result, PLHPs were available in 43 states in 2014

**Gunjan Khanna,  
PhD; Deepali  
Narula; and  
Neil Rao**

<sup>1</sup> Detailed explanations for how all market growth and financial performance calculations were done can be found in the Appendix.



(Exhibit 3), and enrollment in the plans had surged to 15.3 million, from 12.4 million in 2010.

Most of the enrollment growth in PLHPs occurred in the Medicaid, Medicare Advantage, and individual markets (Exhibit 4). However, the small-group market also increased slightly from 2010 to 2014 (2.6% CAGR). In contrast, enrollment decreased in the large-group and administrative-services-only (ASO) markets (CAGRs were -4.7% and -2.4%, respectively). The large-group and ASO markets are difficult for most PLHPs to serve, and the opportunities for growth in the other markets are more favorable.

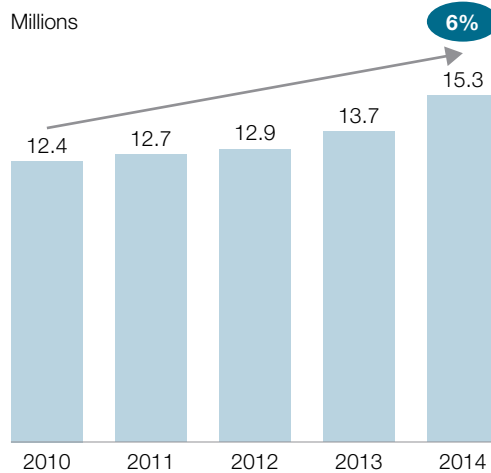
Between 2010 and 2014, the largest enrollment growth in percentage terms occurred in the individual market, primarily because many providers introduced public exchange plans as a way

to drive volume. During that time, enrollment increased at a CAGR of approximately 25%, from about 270,000 to 670,000 lives. The number of providers offering health plans in the individual market rose to 55, from 36. For PLHPs, further growth in this market is likely not only because of the CO-OP shutdowns and losses incurred by large insurers, but also because the penalty for being uninsured reaches its full amount in the 2016 tax year.

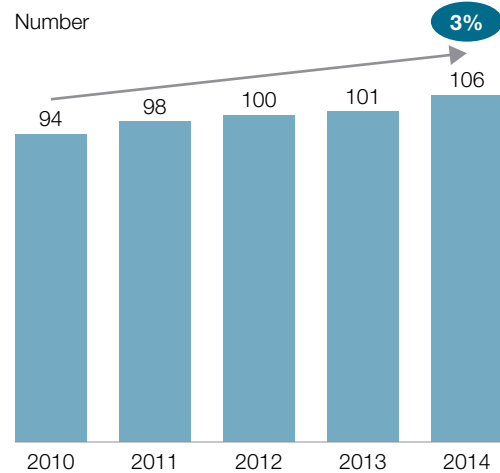
The largest enrollment growth in absolute terms occurred in the managed Medicaid market, from about 6.1 million lives in 2010 to 8.8 million lives in 2014 (a CAGR of more than 9%). The number of providers offering Medicaid plans rose to 51, from 43. Although PLHPs already have high penetration in managed Medicaid (they currently cover

## EXHIBIT 1 Overall PLHP enrollment has grown faster than the number of plans

### Growth in PLHP enrollment<sup>1,2</sup>



### Growth in number of PLHPs<sup>2,3</sup>



PLHP, provider-led health plan.

<sup>1</sup> Count of Medicare lives does not include cost products.

<sup>2</sup> Count of Medicaid lives and plans does not include the Visiting Nurse Service of New York or the Universal Care Medical Group because of differences in financial reporting.

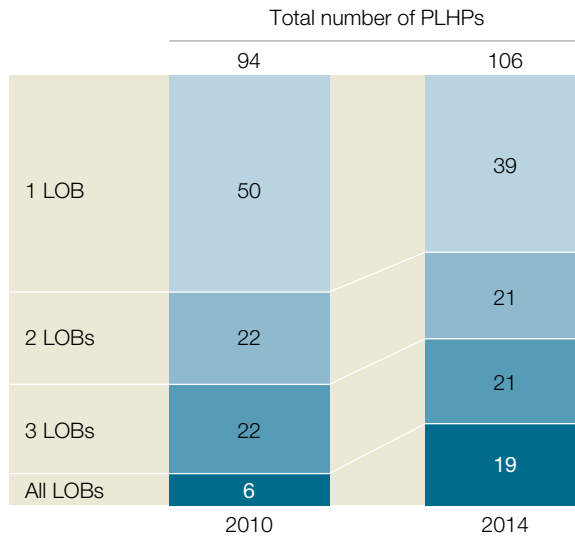
<sup>3</sup> Health plans with fewer than 25 lives are excluded.

Source: NAIC 2010–14 end-of-year Supplementary Health Care Exhibits and its 2010–14 end-of-year Premium, Enrollment, and Utilization Exhibits; CMS August 2010–14 enrollment by county; McKinsey Provider Plan Database

**EXHIBIT 2 PLHPs are diversifying across lines of business**

**PLHPs by line of business (LOB)<sup>1,2,3,4</sup>**

% of total PLHPs



PLHP, provider-led health plan.

<sup>1</sup> Count of Medicare lives does not include cost products.

<sup>2</sup> Count of Medicaid lives and plans does not include the Visiting Nurse Service of New York or the Universal Care Medical Group because of differences in financial reporting.

<sup>3</sup> Health plans with fewer than 25 lives are excluded.

<sup>4</sup> LOBs counted are individual, Medicare, Medicaid, and other commercial (large-group, small-group, and administrative-services-only).

Source: NAIC 2010–14 end-of-year Supplementary Health Care Exhibits and its 2010–14 end-of-year Premium, Enrollment, and Utilization Exhibits; CMS August 2010–14 enrollment by county; McKinsey Provider Plan Database

about 22% of the people in that market), several factors suggest that significant room for market share growth remains. For example, Medicaid expansion is continuing across the states.

(The 27 states that had expanded Medicaid by November of 2015 included about 60% of all enrollees in that program.) In addition, the shift to value-based payments is amplifying the need for population health management skills, and state regulations for managed Medicaid programs are favorable for PLHPs.

In the Medicare Advantage market, enrollment in PLHPs grew at a CAGR of about 17% between 2010 and 2014, to 1.1 million lives, from approximately 600,000. The number of provid-

ers offering Medicare Advantage plans increased to 69, from 47. Enrollment in provider-sponsored Medicare Advantage plans is expected to continue to grow given the favorable conditions (e.g., the adoption of risk-bearing and other innovative payment models and the heightened focus on reducing inpatient utilization rates). Nevertheless, many providers appear to view the Medicare Advantage market as having less opportunity for growth than either the individual or Medicaid markets. The number of Medicare Advantage enrollees is low (in comparison with the size of the individual and Medicaid markets), and these consumers are typically well served by payors, leaving limited opportunity for PLHPs.



Despite the significant increase in overall enrollment, most PLHPs remain comparatively small. In 2014, only five providers had plans that cover more than 500,000 lives. In the aggregate, however, these plans had a fairly large market share (from about 16% in the total Medicare Advantage market to 31% in the total Managed Medicaid market). Enrollment is also concentrated at the state level. More than 40% of all people covered by PLHPs live in Pennsylvania, Michigan, New York, or Texas (see Exhibit 3).

## Financial performance

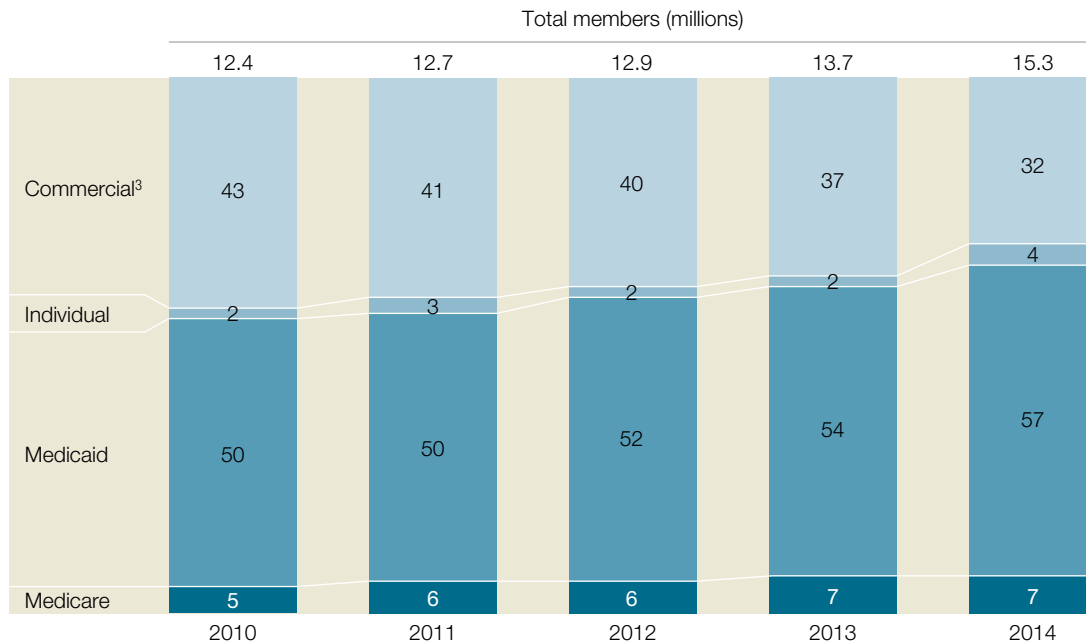
Between 2010 and 2014, average medical loss ratios (MLRs) for PLHPs increased steadily in most lines of business (Exhibit 5). In the Medicaid market, for example, the average MLR rose to 89%, from 86%. The exception was the large-group market; the average MLR there decreased to 87%, from 89%.

During those years, average administrative loss ratios (ALRs) in most lines of business

### EXHIBIT 4 PLHP enrollment has increased in all markets except large-group commercial

#### PLHP enrollment by line of business<sup>1,2</sup>

% of total PLHP members



PLHP, provider-led health plan.

<sup>1</sup> Medicare lives do not include cost products.

<sup>2</sup> Count of Medicaid lives and plans does not include the Visiting Nurse Service of New York or the Universal Care Medical Group because of differences in financial reporting.

<sup>3</sup> Commercial including non-individual commercial plans: large-group, small-group, and administrative-services-only plans.

Source: NAIC 2010–14 end-of-year Supplementary Health Care Exhibits and its 2010–14 end-of-year Premium, Enrollment, and Utilization Exhibits; CMS August 2010–14 enrollment by county; McKinsey Provider Plan Database

were often slightly higher (usually, by no more than 1% of premiums) among PLHPs than in the rest of the market. Exceptions did occur, though. In 2014, for example, both Medicaid and Medicare PLHPs had ALRs slightly below the industry average.

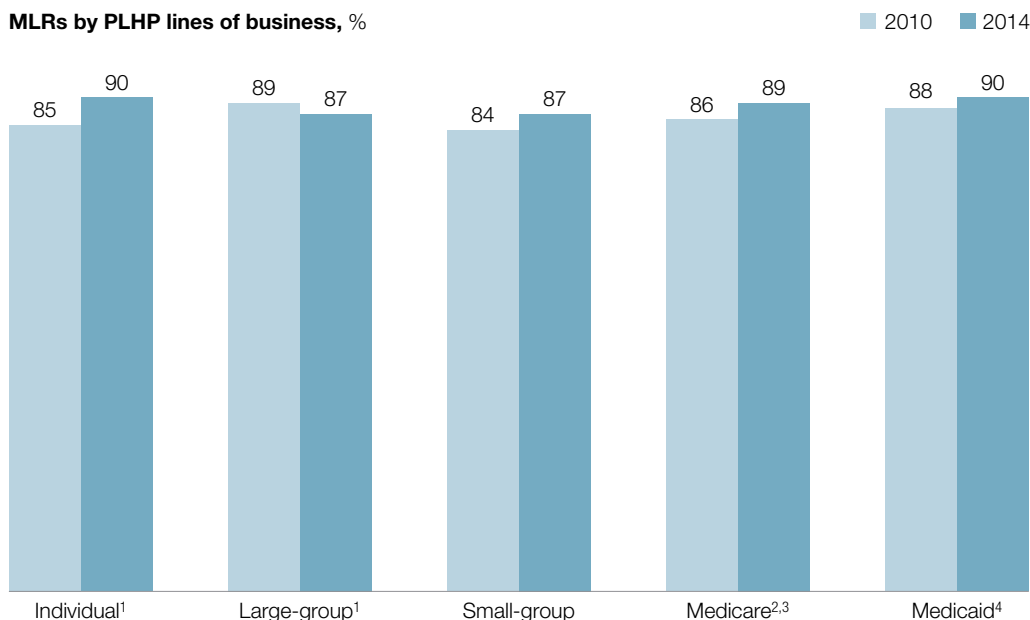
The comparatively high MLRs and ALRs narrowed the operating margins on the health plans but, in some cases, may have had a more favorable effect on the health systems as a whole. Only by considering the economic impact across the entire integrated system can providers understand the full impact of owning a health plan.

To look more closely at the economics of a PLHP, we conducted deep dives on the two areas with the strongest current growth: managed Medicaid and the individual market.

### Managed Medicaid

Among the 51 providers offering managed Medicaid plans, operating margins varied significantly in 2014 (Exhibit 6). The average was about 1.3%. Among the PLHPs with less than 100,000 lives, operating margins averaged 1.58%, compared with 0.53% for plans covering 100,000 to 500,000 lives and 2.95% for plans with more than 500,000 lives. However, within each of these three subsets,

## EXHIBIT 5 PLHPs have higher MLRs in most lines of business



PLHP, provider-led health plan.

<sup>1</sup> Medical loss ratios (MLRs) reflect payments and receivables from ACA risk programs.

<sup>2</sup> Financials include claims and premiums from cost products.

<sup>3</sup> Because NAIC Supplementary Healthcare Exhibits were not always submitted, MLRs are known only for about 80% of the Medicare line of business.

<sup>4</sup> Count of Medicaid lives and plans does not include the Visiting Nurse Service of New York or the Universal Care Medical Group because of differences in financial reporting.

Source: NAIC 2010–14 end-of-year Supplementary Health Care Exhibits and its 2010–14 end-of-year Premium, Enrollment, and Utilization Exhibits; CMS August 2010–14 enrollment by county; McKinsey Provider Plan Database

there was significant variation in operating margins, indicating an opportunity for many provider-led managed Medicaid plans to better manage profitability. That aggregate profits as a percentage of premiums were highest among carriers with more than 500,000 lives suggests that scale is important.

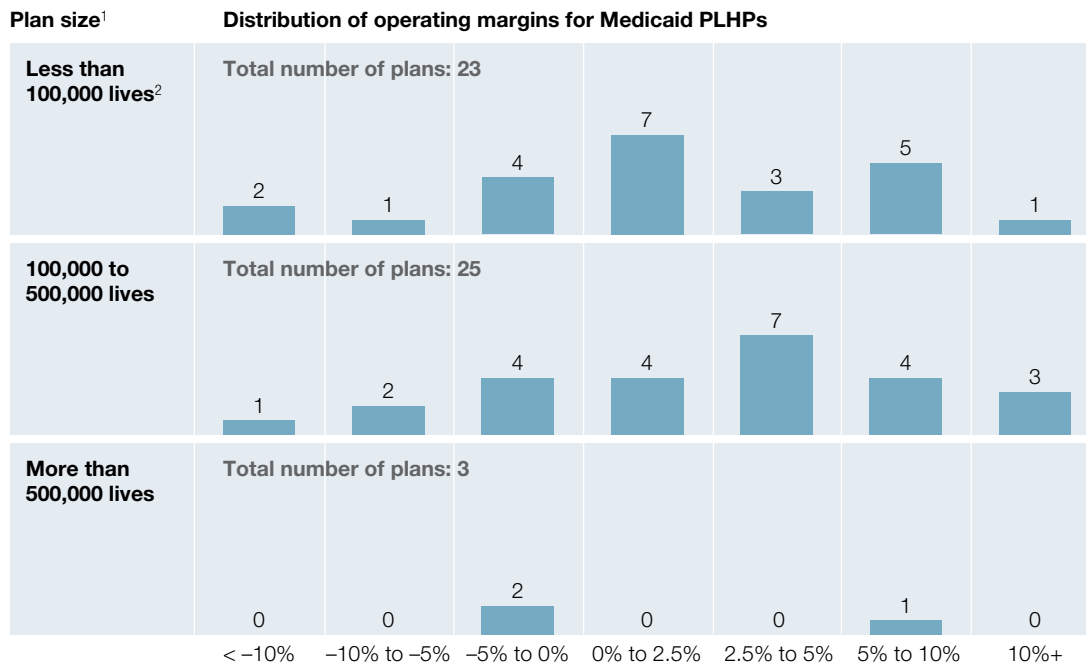
At least four providers focusing on children’s health are currently offering Medicaid PLHPs. Together, these PLHPs covered 9% of total Medicaid enrollees in 2014. Before 2013, these plans tended to have lower MLRs than other PLHPs did. Since then, their MLRs have risen and now exceed those of other PLHPs.

**Individual market**

Although the performance of the PLHPs present on the public exchanges has varied, most have struggled to achieve profitability in the individual market (as have many other carriers). In the aggregate, these plans had an operating margin loss of 10.5% post-tax in 2014 after the 3Rs (reinsurance, risk corridors, and risk adjustment) were factored in.<sup>2</sup> Nevertheless, 29% of the PLHPs in the individual market had positive margins that year.

In general, the PLHPs received better results than most other carrier types did if the 3R payments are calculated as a percentage of

**EXHIBIT 6 Scale appears to benefit PLHPs in the Medicaid market**



PLHP, provider-led health plan.

<sup>1</sup> Plans with fewer than 25 lives were not included.

<sup>2</sup> Count of Medicaid lives and plans does not include the Visiting Nurse Service of New York or the Universal Care Medical Group because of differences in financial reporting.

Source: NAIC 2010–14 end-of-year Supplementary Health Care Exhibits (SHCE) and its 2010–14 end-of-year Premium, Enrollment, and Utilization Exhibits; 990 forms (when SHCE is missing); CMS August 2010–14 enrollment by county; McKinsey Provider Plan Database

<sup>2</sup> Kaiser Permanente was excluded from this and all other analyses of market growth and financial performance. Given its origins as an insurer and atypical structure, we have not included it in the set of PLHPs.

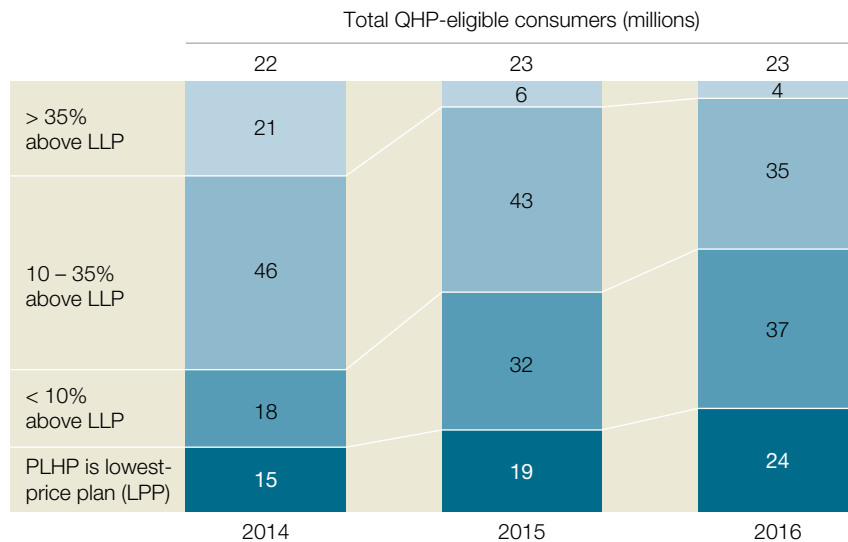
premiums (the exception was the CO-OPs, which usually received significant amounts in reinsurance). As a group, the PLHPs received the equivalent of about 17% of premiums as 3R payments for 2014, but individual payments varied, especially among the smaller plans: some providers had to pay more than 70%, but others were given more than 150%. Almost all of the 3R money came from reinsurance funds because risk corridor and risk adjustment payments to the PLHPs did not amount to more than 1% of premiums.<sup>3</sup> The reinsurance program will terminate in 2016, which could apply further pressure on margins unless plan pricing is done carefully.

Since 2014, PLHPs have become more price competitive on the public exchanges (Exhibit 7). In the first open enrollment period (OEP), they were the price leader—the carrier offering the lowest-priced silver plan—in 15% of the counties where one or more PLHPs were available. That percentage rose to 19% in the 2015 OEP and then to 26% in 2016. PLHPs were especially likely to become price leaders in areas where CO-OPs exited the 2016 exchanges. It is not yet clear, however, whether the competitive pricing is a sustainable strategy for many exchange PLHPs, given their large losses to date and the upcoming termination of some of the transitional programs (especially reinsurance).

**EXHIBIT 7 PLHPs are becoming more price competitive on the public exchanges**

**Cost of lowest-price PLHPs relative to the lowest-price silver plans<sup>1</sup>**

% of QHP-eligible consumers (in areas where PLHPs are available)



<sup>3</sup>In 2014, PLHPs, like other carrier types, were affected by the change in risk corridor rules to make the program revenue-neutral. Of the risk corridor receivables all carriers booked, only 12.6% was actually paid out to them.

PLHP, provider-led health plan.

<sup>1</sup>In counties where PLHPs are available, the premium for the lowest-price PLHP was compared with the cost of the lowest-price silver plan. The lowest-price PLHPs were then grouped into categories based on the size of the pricing differential. This information was combined with the number of QHP-eligible consumers in each county to determine how many of those consumers could be placed into each category.

Source: McKinsey Exchange Offerings Database; McKinsey Provider Plan Database

The proportion of preferred provider organization (PPO) plans offered by providers on the public exchanges decreased from 22% in the 2014 OEP to 20% in 2016. (Most other carriers have been making a similar move). The change may reflect an attempt to manage utilization more tightly given the financial pressures all payors are facing. In contrast, there was a small increase in the number of broad-network plans offered by providers.

## Design choices for a PLHP

There are four essential questions a health system should ask itself if it is considering offering a PLHP. These questions are also helpful for providers already offering plans that want to re-evaluate their differentiation in the market.

**How can consumerism benefit a PLHP?** As healthcare consumerism rises, what many people want from providers and health insurers is changing—in ways that could put PLHPs at an advantage. If providers want to use health plans to increase volume, however, they must understand consumers' price sensitivity and benefit preferences.

Data from the public exchanges demonstrates that people who buy health insurance for themselves tend to prefer low-cost plans—but not necessarily the lowest-cost product. For example, in a survey of exchange participants we conducted after the close of the 2015 OEP, 49% of the respondents who had purchased exchange plans and remembered the plans' pricing said that they had selected products with premiums that were average or above average relative to other plans within the comparable metal tier.<sup>4</sup>

Furthermore, consumers appear to be willing to pay for convenience. In a broader consumer

survey we conducted in 2015, we explained to the more than 2,200 participants what an integrated delivery network (IDN) was and then asked them to tell us which features they would be willing to pay up to \$20 per month for if they joined this kind of network.<sup>5</sup> The features selected most often were guaranteed appointments, after-hours appointments, and weekend appointments.

We also asked the participants to tell us how much they would want some of the features that typically characterize an IDN if those features were offered to them. Two of the features chosen most often indicate that consumers are willing to let their health information be shared between insurers and providers. Specifically, 76% said they would want their providers and health insurer to have a single, up-to-date view of their care history and future care needs. And, 75% said that they would want technology that allows all their providers to access their health and treatment information, and to coordinate care.

Thus, there is an opportunity for PLHPs to consider pricing and product benefits in a new way. The product benefits should be tailored to the strengths of the care management offered by the underlying health system.

### When is growth through a PLHP most likely?

If a health system is looking for growth through a PLHP, it should consider carefully which regions are suitable and which are not. The most suitable place for a PLHP is a region where the health system has a large share of a consolidated provider market and the level of payor consolidation is low. Even in this situation, however, the health system should make certain that its physician alignment skills are as strong as possible if it is to maximize the benefit of owning a health plan. In addition, it should be

<sup>4</sup>McKinsey's 2015 Post-Open Enrollment Survey.

<sup>5</sup>McKinsey's 2015 Consumer Health Insights Survey.



sure to have solid capabilities in both population health management (to contain medical costs) and the necessary actuarial analyses (to price products accurately). PLHPs also need to account for existing third-party payor relationships.

**Is an alternative type of administrative infrastructure possible?** Often, the administrative infrastructure used to set up a PLHP is similar to that of a stand-alone health plan (granular claims requirements, extensive prior authorization lists, utilization management and care management prerequisites, etc.). If most health plans led by providers are going to cover fewer than 100,000 or 150,000 lives, however, then achieving benefits of scale through this type of infrastructure will be next to impossible. Health systems have an opportunity to depart from this approach by establishing a radically different administrative infrastructure—for example, one that aligns clinical policies between the health system and the health plan’s business units to minimize the need for utilization management, strives for an auto-adjudication rate of 90% or higher, establishes a common care management infrastructure, and makes claim submissions an exception rather than a necessity. We recognize that the administrative infrastructure must take into consideration the health system’s relationship with third-party providers and other payors in the market. Nevertheless, we believe that all PLHPs have—and should take advantage of—the chance to rethink the traditional payor administrative infrastructure.

**What can be gained through granular analytics?** Health systems with their own health plans have an important advantage: integrated claims and clinical data that can allow them to undertake sophisticated analytics. As a result, they should be able to make the most of opportunities for better medical management by identifying at-risk

patients, offering them appropriate preventive care, and, when necessary, intervening early. For example, the health systems can use the claims and clinical data to accurately determine the end-to-end cost of managing their high-risk patients and then change their approach to managing these patients (e.g., by directing them to the right care settings and offering timely interventions). Integrated data can also give health systems unique insights into the health plan’s performance in the different channels they are using to attract members to gain an end-to-end view of the lifetime value of a member within an IDN. The traditional payor or provider approach to calculating lifetime value will lead to conflicting results for an IDN; hence, a unique, comprehensive approach informed by deep analytics is critical.



Offering a health plan may be an attractive growth opportunity for many health systems, but it is not without risk (as current financial data attests). Health systems, if they are to benefit from offering a health plan, will need to be able to understand how they can use consumerism to their advantage and where the best opportunities for growth exist. In addition, they must be willing to rethink the administrative infrastructure they want to use and take advantage of the integrated claims and clinical data at their disposal. ○

**Gunjan Khanna, PhD** ([Gunjan\\_Khanna@mckinsey.com](mailto:Gunjan_Khanna@mckinsey.com)), a partner in McKinsey’s Pittsburgh office, is a leader of the firm’s efforts on integrated delivery systems. **Deepali Narula** ([Deepali\\_Narula@mckinsey.com](mailto:Deepali_Narula@mckinsey.com)) is a consultant in McKinsey’s Dallas office. **Neil Rao** ([Neil\\_Rao@mckinsey.com](mailto:Neil_Rao@mckinsey.com)) is an associate partner in its Seattle office.

The authors would like to thank Martina Miskufova, Brendan Murphy, and Ellen Rosen for their support and assistance.

## Appendix

### Data used

- Some data about the products offered on the 2015 and 2016 public exchanges has now been made public, but financial results are available only through 2014. Thus, all calculations are based on 2014 data unless otherwise stated.
- The **McKinsey Provider Plan Database** includes detailed information about the 106 health systems currently offering one or more health plans in the United States. Among other things, the database provides details about 2010-2015 plan financial data, including (by state and entity) covered lives, health premiums earned, claims, and G&A expenses. It also describes the associated provider organization, the state(s) in which the plan operates, the states where it is offered on public exchanges, and the year(s) of opening and termination (2010-2014). Thus, the database contains information valuable to payors, providers, pharmaceutical companies, and medical device manufacturers.
- The **McKinsey Exchange Offerings Database** offers a granular view of all individual exchange products across the country offered in 2014 through 2016, as well as pre-reform benchmarks. It includes details on more than 340,000 ACA-compliant on-exchange products (from all 3,143 U.S. counties), such as premiums, benefit design, and network design. In addition, it includes carrier and pricing details for all new entrants and incumbents (including 315 carriers participating on the

2016 exchanges), as well as hospital network data (including more than 2,000 unique exchange networks in 2014 and over 2,500 such networks in both 2015 and 2016, as well as network participation data for all U.S. acute care hospitals).

- The primary sources of external data used in the article were the National Association of Insurance Commissioners' (NAIC's) Supplemental Health Care Exhibits; its Premium, Enrollment and Utilization Exhibits; and its Analysis of Operations Exhibits (for G&A expenses). Additional data was obtained from the August 2015 enrollment report by county released by the Center for Medicare and Medicaid Services (CMS); Internal Revenue Service (IRS) 990 forms; and financial reports from the California Department of Health Care (DMHC).

### Calculations

- **Number of health plans.** Calculating the number of health plans offered by providers (or other insurers) in all lines of business is difficult because the available sources differ in their method of reporting (e.g., by legal entity, company, or organizations within companies). Comparisons between sources are therefore often inexact. For that reason, we have focused in this paper on the number of providers offering health plans rather than the aggregate number of plans being offered.
- **Enrollment.** The enrollment calculations in this paper are based on data from the NAIC's Supplemental Health Care Exhibits

## Appendix *(continued)*

and its Premium, Enrollment and Utilization Exhibits, as well as CMS's August 2015 enrollment report by county. This approach is somewhat different from the one used in our last paper on PLHPs. In that paper, we used national InterStudy lives data which, in some cases, included covered individuals in U.S. territories. Also, the InterStudy calculations employed a wider definition of fully insured commercial lives. As a result, its estimates of overall market size are significantly larger.

- **Growth estimates.** The estimates of growth in the Medicaid market are based on the fact that as of February 2016, 32 states (including the District of Columbia) had expanded Medicaid. The calculations of Medicare enrollment growth include only members in Medicare Advantage plans, not Medicare cost plans.
- **Financial performance.** Financial data was taken from the NAIC's Supplemental Health Care; Premium, Enrollment and Utilization; and Analysis of Operations Exhibits. For those carriers that did not submit this information to the NAIC, we supplemented the financial data with information from IRS 990 forms and DMHC financial reports.

—The Visiting Nurse Service of New York and the Universal Care Medical Group are not included in the estimates of financial performance among Medicaid PLHPs because of differences in their financial reporting.

—The estimates of Medicare Advantage financial performance cover about 80% of the total Medicare market and include cost products.

- **Aggregate margin loss.** The aggregate margin loss was calculated by taking the sum of all margins (positive or negative) reported by PLHPs and then dividing that amount by the sum of all premiums.

- **Operating margins.** For all lines of business, operating margins were calculated as premiums paid minus SG&A expenses, claims, taxes, licenses, and fees.

—For commercial lines and Medicare, this information was derived from the Supplemental Health Care Exhibit.

—For Medicaid, it was taken from the Premium, Enrollment and Utilization Exhibit as well as the Analysis of Operations Exhibit (for G&A expenses).

For more information, contact [McKinsey\\_on\\_Healthcare@mckinsey.com](mailto:McKinsey_on_Healthcare@mckinsey.com)

Copyright © 2016 McKinsey & Company

Any use of this material without specific permission of McKinsey & Company is strictly prohibited.

[www.mckinsey.com/client\\_service/healthcare\\_systems\\_and\\_services](http://www.mckinsey.com/client_service/healthcare_systems_and_services)

NATIONAL  
ACADEMY  
OF SOCIAL  
INSURANCE

# Integrated Delivery Networks: In Search of Benefits and Market Effects

Conducted for the Academy's Panel on Addressing Pricing Power  
in Health Care Markets

by Jeff Goldsmith, Lawton R. Burns,  
Aditi Sen and Trevor Goldsmith



NATIONAL  
ACADEMY  
OF SOCIAL  
INSURANCE

The **National Academy of Social Insurance (NASI)** is a nonprofit, nonpartisan organization made up of the nation's leading experts on social insurance. Its mission is to advance solutions to challenges facing the nation by increasing public understanding of how social insurance contributes to economic security.

Social insurance encompasses broad-based systems for insuring workers and their families against economic insecurity caused by loss of income from work and the cost of health care. NASI's scope covers social insurance such as Social Security; Medicare; workers' compensation; and unemployment insurance, related public assistance, and private employee benefits.

The Academy convenes steering committees and study panels that are charged with conducting research, issuing findings and, in some cases, reaching recommendations based on their analyses. Members of these groups are selected for their recognized expertise and with due consideration for the balance of disciplines and perspectives appropriate to the project.

# **Integrated Delivery Networks:**

## **In Search of Benefits and Market Effects**

Conducted for the Academy's Panel on Addressing Pricing Power  
in Health Care Markets

by Jeff Goldsmith, Lawton R. Burns,  
Aditi Sen and Trevor Goldsmith

February 2015

## Study Panel on Addressing Pricing Power in Health Care Markets

---

**Robert Berenson, M.D., Co-Chair**

Institute Fellow  
Urban Institute

**G. William Hoagland, Co-Chair**

Senior Vice President  
The Bipartisan Policy Center

**David Dranove**

Walter J. McNerney Professor of Health  
Industry Management  
Northwestern University's Kellogg School of  
Management

**Paul Ginsburg**

Norman Topping Chair in Medicine and Public  
Policy, Sol Price School of Public Policy and  
Director of Health Policy, Schaeffer Center for  
Health Policy and Economics, University of  
Southern California

**Sherry A. Glied**

Dean, Robert F. Wagner Graduate School  
of Public Service, New York University

**Jeff Goldsmith**

President  
Health Futures, Inc.

**Bob Kocher, M.D.**

Partner  
Venrock

**William E. Kramer**

Executive Director for National Health Policy  
Pacific Business Group on Health

**Ronald Levy**

Executive in Residence  
Health Management & Policy  
St. Louis University College of Public Health  
Social Justice

**Doug P. McKeever**

Chief  
Health Policy Research Division  
CalPERS

**Keith B. Pitts**

Vice Chairman  
Tenet Healthcare

**Barak D. Richman**

Bartlett Professor of Law and Business  
Administration  
Duke University

**James C. Robinson**

Kaiser Permanente Distinguished Professor of  
Health Economics at the School of Public Health  
University of California, Berkeley

**James Roosevelt, Jr.**

President and Chief Executive Officer  
Tufts Health Plan

**John W. Rowe, M.D.**

Professor of Health Policy & Management  
Columbia University  
Mailman School of Public Health

**Nicholas Wolter, M.D.**

Chief Executive Officer  
Billings Clinic

*The views expressed in this report are those of the study panel members and do not necessarily reflect the organizations with which they are affiliated.*

## Authors

---

**Jeff Goldsmith**

Associate Professor of Public Health Sciences  
University of Virginia  
and  
President  
Health Futures, Inc.

**Lawton R. Burns**

James Joo-Jin Kim Professor of Health Care Management  
The Wharton School, University of Pennsylvania

**Aditi Sen**

Doctoral Student  
The Wharton School, University of Pennsylvania

**Trevor Goldsmith**

Research Director  
Health Futures, Inc.

## Project Staff

---

**Lee Goldberg**

Project Director

**Sabiha Zainulbhai**

Health Policy Associate (through July 2014)

**Natalie Chong**

Intern (Summer 2014)

**Alison Evans Cuellar**

Consultant

**Alwyn Cassil**

Consultant

## Acknowledgements

---

The National Academy of Social Insurance (NASI) gratefully acknowledges the Robert Wood Johnson Foundation (RWJF), The California HealthCare Foundation, based in Oakland, California, and the Jayne Koskinas Ted Giovanis Foundation for Health and Policy for their generous support of this project.

---





# Table of Contents

Executive Summary.....	1
Methodology .....	1
Claimed IDN Benefits.....	1
What Does the Evidence Show .....	2
Analyzing the Performance of 15 IDNs.....	2
Conclusions.....	3
Policy Recommendations .....	4
Introduction .....	5
Literature Review .....	6
“The Right Care at the Right Place at the Right Time”: Potential Societal Benefits of Integrated Delivery Networks .....	7
Provider-Centric Rationales for IDN Formation .....	9
The Evidence on Physician-Hospital Integration .....	12
Provider-Insurance Integration.....	13
The Logic and Performance of Diversification.....	14
IDN Financial/Performance Analysis.....	17
Data Sources .....	17
Characteristics of Sample IDNs .....	18
Issues Related to the IDN Insurance Function .....	23
Discussion .....	27
Policy Recommendations .....	28
Conclusion .....	29
References.....	30





# Executive Summary

In January 2014, the National Academy of Social Insurance commissioned a study of the performance of Integrated Delivery Networks (IDNs), incident to its Study Panel on Pricing Power in Health Care Markets. The premise of this analysis was that any examination of the role that hospitals play in health care cost growth is complicated by the fact that in most large markets, the significant hospitals are part of larger, multi-divisional health enterprises. In these markets, hospitals may be part of horizontally integrated hospital systems operating multiple hospitals; vertically integrated health services networks that include physicians, post-acute services and/or health plans; or fully integrated provider systems inside a health plan (e.g. with no other source of income than premiums) like Kaiser Permanente. The latter two models are collectively labeled IDNs.

IDNs have very different stated purposes than mere collections of hospitals: to coordinate care across the continuum of health services and to manage population health. IDN advocates claim that these complex enterprises yield both societal benefits and performance advantages over less integrated competitors. The purpose of this analysis is to evaluate the evidence to support these claims.

## Methodology

Despite more than 30 years of IDN development, remarkably little is known about their performance. To fill this gap, the authors performed a comprehensive review of the academic literature on IDN performance, as well as the broader question of the benefits of diversification (i.e., the efficiency of offering diverse services under common sponsorship).

The authors also conducted an analysis of publicly available financial and qualitative performance data on nationally prominent IDNs and their subsidiary hospitals from their financial disclosures to bond holders, Medicare cost reports, Medicare quality reporting systems, the Leapfrog Group's Safety analyses, and the Dartmouth Atlas' reporting on care patterns at the end of life. Because quality and cost information is not aggregated at the IDN level, the authors compared the publicly available performance information on the IDNs' flagship hospital in its principal metropolitan or regional market with that flagship's most significant in-market competitor.

## Claimed IDN Benefits

In the literature review, claimed benefits generally fall into two categories: benefits to society and benefits to the IDNs themselves. Under claimed societal benefits, the principal ones are providing better coordinated care leading to improved quality and lower cost. These improvements are said to derive from eliminating duplicative tests and reducing unnecessary care, as well as coordinating care

across the continuum (physician's office, hospital, and post-acute home care). Joining these activities with the assumption of insurance risk, IDNs are believed to be able to pare down the volume incentives inherent in fee-for-service medicine and allocate capital to areas of community need, including health promotion and prevention.

Under claimed provider rationales for IDN formation, the principal advantages are improved efficiency (presumably translating into better operating performance) as well as enhanced market competitiveness and bargaining power with employers and/or health plans. Vertical integration with physicians and health plans is also believed to reduce uncertainty due to technological or delivery system change and lower administrative expense and transaction costs.

## What Does the Evidence Show?

There is scant evidence in the literature of either societal benefits or advantage accruing to providers from IDN formation. From the *societal* perspective, there is little evidence that integrating hospital and physician care has helped to promote quality or reduce costs. Indeed, there is growing evidence that hospital-physician integration has raised physician costs, hospital prices and per capita medical care spending. Similarly, hospital integration into health plan operations and capitated contracting was not associated either with clinical efficiency (e.g. shorter lengths of stay) or financial efficiency (e.g. lower charges per admission).

From the *provider* perspective, the available evidence suggests that the more providers invest in IDN development, the lower their operating margins and return on capital. Diversification into more businesses is associated with negative operating performance. This is consistent with the management literature, which shows that diversification increases a firm's size and complexity, in turn increasing its cost of coordination, information processing, and governance/monitoring.

Moreover, there are few or no scope economies *within* health plans, hospitals, or physician groups — let alone *between* these lines of business contained within IDNs. Provider-sponsored insurance plans face similar problems regardless of whether they were formed by hospitals or physician groups: poor capitalization, lack of actuarial and underwriting expertise, limited marketing capability both to employers and consumers, adverse selection risk, and an inability to reach minimum sufficient scale of enrollment.

## Analyzing the Performance of 15 IDNs

As part of this report, the authors conducted a new analysis of 15 of the largest IDNs in the country. Publicly disclosed hospital performance information is not aggregated at the IDN level, so it was impossible to compare IDN performance with industry norms. However, we were able to evaluate the relationship of IDN system profitability as well as net collected revenues with hospital market concentration. We found no relationship between the degree of hospital market concentration and IDN operating profits, or between the size of the IDN's bed complement or its net collected revenues and operating profits.

Because there is extensive hospital-specific financial and quality reporting, the authors conducted a secondary analysis of the performance of the IDN's flagship hospital in its principal metropolitan or regional market and its most significant local competitor. We found no detectable quality or safety differences in a paired comparison between IDN flagship hospitals and their in-market competitors. However, in 10 of 14 cases where comparison was possible, the IDN flagship had higher Medicare cost per case, adjusted for case mix. Further, in 12 of the 15 cases where comparison was possible, the IDN flagship hospital had higher total medical spending in the last two years of the patient's life vs. its in-market competitor, according to the Dartmouth Atlas.

Regarding IDN sponsorship of insurance, there was no discernible relationship between the amount of "revenue at risk" (e.g. insurance premiums, capitated health plan revenue or two-sided risk by an accountable care organization) and the IDN's operating profit. However, IDN flagships in systems that had no "revenues at risk" had 8% lower Medicare per case cost than their in-market competitors, but flagship Medicare costs per case were 20% higher if the IDN had some "revenues at risk."

While there is IDN enterprise-level financial disclosure both to bond holders and to the federal government, gaps in these disclosures significantly hamper detailed analysis. In only five of the 15 IDNs studied was it possible to determine the percentage of IDN revenues generated by their hospitals; in none of the 15 was it possible to determine their hospitals' contribution to IDN operating profit. The same could be said of their physician groups: in only five of the 15 IDNs could it be determined how much revenue was generated by physician services, let alone the contribution, if any, to the IDN's profits.

Further, it was impossible to discern from their disclosures how ancillary income and overhead were allocated between physician practices and the rest of the IDN's businesses. The authors were also unable to access claims information (due to limited resources) to determine how IDN provider businesses are paid by health plans (e.g. is the insurance risk retained by the IDN health plan or passed on to providers through shared premium or capitated risk).

## Conclusions

Despite more than 30 years of public policy advocacy on behalf of IDN formation, there is scant evidence in the literature either of measurable societal benefits from IDNs or of any comparative advantage accruing to providers themselves from forming IDNs. We have similarly found no such evidence in our analysis of 15 IDNs. Serious data limitations hamper anyone attempting to evaluate IDN performance based on publicly disclosed information. IDN financial disclosures obscure the operating performance of their hospitals and physician groups.

There does not appear to be a relationship between hospital market concentration and IDN operating profit. However, if the performance of the IDN's flagship hospital is any indicator of overall systemic efficiency, the IDNs' flagship hospital services appear to be more expensive, both on a cost-per-case and on a total-cost-of-care basis, than the services of its most significant in-market competitor. This runs counter to the theoretical claim of IDN operating efficiency. Further, the flagship facilities of IDNs operating health plans or having significant capitated revenues are more expensive per case (Medicare case-mix adjusted) than their in-market competitors.

The authors would have greater confidence in these findings if they covered not only multiple years of information but also multiple institutions in the IDN portfolio (e.g. its suburban or rural hospitals, etc.). Further, the central question of whether IDNs have abused their market power in metropolitan markets can only be answered by examining actual service-specific payments to their hospitals by local health plans and by determining the profits generated by their hospital portfolio.

## Policy Recommendations

The public interest would be served if IDNs provided more detailed routine operating disclosures that would enable financial analysts, academic researchers, and the policy community to understand the performance of IDNs' subsidiary businesses and the overhead and revenue allocation strategies they pursue. Present disclosures are less illuminating than those of publicly traded hospital operators and are inadequate to answer definitively the question of whether there are measurable societal or institutional benefits from IDN formation.

The two crucial disclosures needed are the amount of hospital operating profit as a percentage of the IDN's total earnings and the IDN's physician and hospital compensation policies. How IDNs allocate overhead and ancillary services income between the three main lines of business should also be disclosed. It should also be possible to determine from an IDN disclosure if capitated risk is transmitted from the IDN's health plan or risk-accepting organization to its hospitals and physicians. Analysis of societal benefits would also be materially aided by a comprehensive, national all-payer claims database that would enable comparative analysis of what IDNs are paid for hospital and physician services compared to their competitors.

# Introduction

In the summer of 2013, the National Academy of Social Insurance created a panel to study the effect of pricing power on health care markets. One concern of this panel is that the consolidation of hospitals might have led to hospital market concentration that enables dominant actors to demand and receive quasi-monopoly prices for their services from local and national insurers.

However, in most large metropolitan health care markets, the major hospitals are subsidiaries of larger enterprises. Hospitals may be part of horizontally integrated hospital systems operating multiple hospitals in the community, region, or nationally; vertically-integrated health services networks that include physicians and/or health plans operating in one or more communities; or fully integrated provider systems inside a health plan (e.g. with no other source of income than premiums) like Kaiser Permanente. The latter two models are collectively termed Integrated Delivery Networks (IDNs). The fact that these latter enterprises are arrayed across the continuum of care and assume premium risk significantly complicates the analytic task of understanding the influence of their hospital assets on health care prices or utilization.

The stated purposes of IDNs are very different from those of multi-hospital systems: to integrate care across a continuum of providers and to assume responsibility for the health of populations. Simply to assume that IDNs are mere collections of hospitals is to commit a category error. Many IDN CEOs argue that they created their systems to defend themselves against the pressures of highly concentrated health insurance markets or to anticipate public policy demands for accountable care and population health. IDN managements will further argue that the pricing power they exert in hospital markets is to serve larger social purposes: creating care management infrastructure, subsidizing services in the care continuum that are not adequately paid for directly (including, many would argue, physician services), caring for those without health insurance, supporting medical education and research, and providing community service.

For more than 30 years, health policy advocates have urged that hospital systems transform themselves into IDNs as the logical infrastructure for population health. Advocates believe that IDNs should be structured like large prepaid group practices such as Kaiser, whose sole source of revenues is health premiums. Those advocates believe that as IDNs assume more economic risk, either delegated risk through capitated payments from health plans or actual insurance risk through “captive” health plans, IDNs will evolve into Kaiser-like entities, with compelling incentives to control costs.

Many IDNs already sponsor their own health plans, contract on a capitated basis with health plans, or are active participants in accountable care organization (ACO) demonstrations where they assume



at least one-sided risk. The Patient Protection and Affordable Care Act (PPACA) prompted hospitals to engage in multiple strategies simultaneously: merging into larger hospital systems, acquiring physician practices and assembling them into groups, developing health plans, and entering risk contracts.

What is known about the economics of IDNs? Do IDNs return benefits to society commensurate with their stated purposes to “integrate care across the continuum and manage the health of populations?” Where do they generate their net income? How much of their revenue is “at risk” and how does it affect system performance? What is the relationship between their stream of earnings and the community benefits they provide?

To date, despite more than 30 years of policy advocacy on their behalf, very little is actually known about IDN performance. In a recent report, the Brookings Institution (2013) noted that the potential for cost and quality benefits flowing from current restructuring efforts by providers is unknown. This paper seeks to address the gap in our understanding of IDNs using a mixture of familiar and new methods.

We first review the academic research on the reality of IDNs’ claimed societal benefits. We then examine the performance of IDNs using data gathered in a new manner. We analyze a sample of 15 nationally prominent IDNs drawing data from their public financial disclosures. We seek to determine the degree to which these IDNs integrate their three principal missions (hospital and facilities, physician services, and health plans) and how to characterize their performance.

Using this sample, we also make head-to-head comparisons of the IDN’s flagship hospital and its principal competitor in their local market to determine if any systemic advantages accrue from membership in the dominant local health system. This exercise demonstrates the difficulties researchers face in evaluating IDN performance and suggests the types of data that may be needed to address the issue. At the end of the paper, we discuss the policy implications of our findings in an era of increasing “transparency.”

## Literature Review

IDNs link together acute-care hospitals with ambulatory care services (e.g., physician offices, surgical and imaging facilities, etc.), post-acute services (e.g., home health, rehabilitation, skilled nursing), and, in many cases, insurance vehicles that cover geographic markets served by the provider businesses. The theoretical benefits of IDNs fall into two broad categories. First, there are potential societal benefits from integrated care: improvements in access to and quality of health care as well as reduced cost due to improved care coordination. Second, IDNs may yield potential provider benefits from integrated care: increased efficiency and ability to achieve economies of scale and scope as well as improved bargaining power with health insurers, enabling greater profitability and financial performance. These latter

***There are potential societal benefits from integrated care: improvements in access to and quality of health care as well as reduced cost due to improved care coordination.***

***...potential provider benefits from integrated care: increased efficiency and ability to achieve economies of scale and scope as well as improved bargaining power with health insurers, enabling greater profitability and financial performance.***

benefits may or may not be passed on to society in general, or to businesses, consumers and public payers, in the form of lower prices or improved service.

Following this summary, we briefly discuss the theorized dimensions of integration contained in IDNs; such forms of integration might influence the impact of integration efforts. We also discuss the results of integration observed to date, proposed barriers to integration, and lessons from previous experiences with integration. We conclude with a discussion of corporate diversification, the evidence from the provider and health plan industries on the benefits (if any) of diversification — including evidence on the Kaiser system, the widely cited IDN exemplar — and the empirical challenges of documenting such benefits.

## **“The Right Care at the Right Place at the Right Time”: Potential Societal Benefits of Integrated Delivery Networks**

Advocates suggest that the central benefit of IDNs is to provide patients “seamless,” coordinated health services along the full “continuum of care” (Burns and Pauly, 2002; Coddington and Moore, 1994; Conrad and Shortell et al., 1993a; Shortell et al., 2000). Vertically integrated health systems are said to allow comprehensive “one-stop shopping” for care through improved coordination among providers (physicians, hospitals, post-acute providers), including sharing of information through medical records available at all points of care (Budetti et al., 2002; Conrad and Dowling, 1990; Peters, 1991).

***The most commonly cited societal benefit of integrated delivery networks, however, is better coordinated care leading to improved quality and lowered costs.***

Further, IDNs could address challenges that a more fragmented delivery system is ill equipped to handle, including chronic disease management, incorporating advances in technology, and new care settings (e.g. ambulatory surgery centers, urgent care centers), as well as dealing with potential provider shortages (Devers et al., 1994). The most commonly cited societal benefit of integrated delivery networks, however, is better coordinated care leading to improved quality and lower costs.

Two main types of quality improvements come up in the literature:

(1) Reduction of duplicative tests and procedures and elimination of unnecessary care, and (2) Assumption of the health of a local population by an integrated system, enabling coordinated health services across sites of care (e.g., between a hospitalization and post-acute care), as well as providing the social and financial support needed during an illness (Burns and Pauly, 2002; Robinson and Casalino, 1996; Shortell et al., 1993; Walston, Kimberly and Burns, 1996).

Enthoven (2009) cited competition between integrated delivery systems as a potential “cure for [the] fragmentation” that characterizes health services provision in the United States. He noted the

importance of eliminating waste from unnecessary and potentially unsafe care for improving quality and reducing costs. Similarly, Shortell, Gillies et al. (1993b) when reporting on their study of integrated health care systems noted,

Integration, of course, is not an end in itself but a means for promoting healthier patients and ultimately healthier communities. When integration is missing, patients are at greater risk for harmful practices and suboptimal service. Indeed, the ultimate payoff from organized delivery systems will not be in administrative or managerial economies of scale but in clinical integration – the ability to provide a coordinated continuum of services that meet patient needs and expectations in a cost-effective fashion.

IDNs with an in-house insurance vehicle that collects a premium for each patient may have a special advantage here. These IDNs can theoretically manage the patient’s care across the provider continuum, reducing or eliminating the volume incentives inherent in fee-for-service medicine and emphasizing instead the allocation of capital and personnel to areas of community need, health promotion, and prevention (Burns and Thorpe, 1993).

***IDNs with an in-house insurance vehicle ... can theoretically manage the patient’s care across the provider continuum, reducing or eliminating the volume incentives inherent in fee-for-service medicine.***

Such models might also offer the necessary salaries and benefits to recruit and retain the appropriate types of physicians and other caregivers, as well as assume managed care functions at the system level (thereby lowering the administrative hassles of negotiation, billing, credentialing, etc., for individual physicians) (Peters, 1991). Finally, IDNs may foster greater alignment among hospitals, physicians, and health plans that, theoretically, result in comprehensive, community-based systems of care similar to Kaiser.

In terms of cost reduction, advocates suggest that vertically integrated care delivery would result in improved efficiency (e.g., through reductions in unnecessary and duplicative care) and lowered transaction and administrative costs that could, in turn, translate into patient savings (e.g. through use of internal hierarchies and controls rather than market transactions to coordinate activities) (Burns and Pauly, 2002; Burns, Goldsmith and Sen, 2013; Walston, Kimberly and Burns, 1996, Robinson and Casalino, 1996).

***...vertically integrated care delivery would result in improved efficiency and lowered transaction and administrative costs that could, in turn, translate into patient savings.***

Further, strengthened administrative controls may allow systems to “achieve better cost and quality control through strong group norms, peer pressure, and integrated finances” (Cuellar and Gertler, 2006). In addition, integrated systems may be able to better adapt to and succeed in new financing mechanisms such as pay-for-performance and bundled payments than individual providers (Crosson and Tollen, 2010).

These types of efficiency gains are typically considered a key rationale for vertical integration in any setting, resulting from increased centralized control and coordination across stages of production and economies of information and technology, as well as potentially reduced costs of monitoring and negotiation due to gains in mutual dependence and trust from integration (Gaynor and Haas-Wilson, 1999; Walston, Kimberly and Burns, 1996).

If IDNs centralize information systems and mechanisms for utilization review and quality assurance, these systems may also be able to “exploit opportunities to coordinate market exchanges internally, improve the exchange of information between adjacent stages in the vertical chain, and jointly optimize profits across these stages of production” (Burns and Thorpe, 2001).

***In addition to improvements in efficiency, IDN advocates have pointed to enhanced market competitiveness and strengthened provider bargaining power as benefits of integration.***

## Provider-Centric Rationales for IDN Formation

The benefits of vertical integration that accrue to hospitals and physicians, rather than to society as a whole or to patients in particular, have been the main focus in the literature on IDNs. In addition to improvements in efficiency, IDN advocates have pointed to enhanced market competitiveness and strengthened provider bargaining power as benefits of integration, especially given an expected movement toward capitated payment (Walston, Kimberly and Burns, 1996).

A lot of this literature appeared during or after the Clinton-era drive toward health reform, which would have channeled provider payments through capitated payment to risk-managing IDNs. Also, as mentioned previously, some IDNs developed for market-specific defensive reasons. The rise of managed care, and the perceived threat posed by the rise of capitated contracting, created anxiety among providers that fueled their efforts to form IDNs (Dranove, Simon, and White, 2002; Town et al., 2007). Vertically integrated systems were seen as affording health care providers competitive leverage given possible movement toward closed-panel networks, global capitation, and consequent downsizing of provider capacity (Burns, Goldsmith and Muller, 2010; Shortell, Gillies and Anderson, 1994).

Putting aside the question of hospital mergers, it is debatable whether vertical integration between hospitals and physician has actually helped improve their market power and competitiveness (Gaynor, 2006). Some have argued that consolidating with upstream suppliers gains hospital-physician firms monopoly or quasi-monopoly power, in turn improving bargaining power for negotiations with managed care plans and other insurers and increasing price leverage (Walston, Kimberly and Burns, 1996).

There is an extensive literature on so-called vertical “foreclosure,” although it is somewhat contradictory. One argument here is that the formation of exclusive hospital-physician relationships is a means of product differentiation within the market as well as a hospital strategy to protect its key source of patients — physician referrals — while preventing competitors’ access to these inputs (Burns and Pauly, 2002). From the hospital perspective, these relationships both ensure that physicians themselves will not compete with hospitals (e.g., by encroaching on the hospital outpatient care market)

and augment the IDN's ability to compete with other entrants into outpatient and inpatient markets (e.g., ambulatory surgical center, imaging centers, etc).

However, there is scant empirical evidence on the anti-competitive effects of vertical integration by hospitals. Tellingly, the antitrust community has not embraced vertical foreclosure as a competitive problem. There is a strong sense among some researchers that the merger of two powerful actors in adjacent stages of the vertical chain (e.g., a powerful hospital and a powerful medical group) will increase provider market power, but, until recently, the regulatory agencies did not appear confident of this. This changed in 2014. In a case brought by the Federal Trade Commission and the Idaho Attorney General, a U.S. District Court ruled that the St. Lukes Health System in Boise violated antitrust laws by its acquisition of the large primary care-based Saltzer Medical Group. This is a rich area for investigation going forward given the pace of vertical consolidation in the industry.

Current advocates of vertical integration cite several drivers beyond increased market power. Cleveland Clinic CEO Toby Cosgrove recently suggested that vertical integration is being driven not only by the fact that acute-care hospitals are becoming less dominant in a health system where an increasing amount of care is occurring in hospital outpatient departments and physician offices but also in newer settings, such as retail clinics and drugstores. In addition, cost pressures are compelling providers to use new technologies, such as tele-health and remote patient monitoring, to improve efficiency and reduce duplication of care (Betzebe, 2013). This argument suggests that vertical integration may be motivated by provider uncertainty regarding their future role in health care delivery due to technological and delivery system innovation. However, reducing provider uncertainty is neither a compelling societal rationale nor a guarantor of increased efficiency savings.

*...vertical integration may be motivated by provider uncertainty regarding their future role in health care delivery due to technological and delivery system innovation.*

For physicians, integration with (e.g. employment by) hospitals can offer access to capital and technology, protection against a changing policy and payment landscape, more stable incomes, and better work-life balance, which is increasingly attractive to physicians (Burns and Pauly, 2002; Burns, Goldsmith and Muller, 2010; Burns and Muller, 2008).

Insurance offerings play a strategic role in many IDNs. Indeed, some argue that it is the insurance function that integrates the diverse service businesses owned by the IDN. Promoters of the IDN concept such as Alain Enthoven and Paul Ellwood advocated that communities should be served by multiple Kaiser-like entities that are more or less clinically self-sufficient and are paid through insurance premiums (per capita per year), rather than through fee for service. This transformation presumably turns hospitals and other facilities that are presently profit centers into cost centers consuming resources within a fixed budget (that is, yearly premium times membership), as well as fostering value-based competition at the level of IDNs, not individual hospitals or physician practices.

At some point in the risk assumption process, containing provider expense and rationalizing service use presumably becomes the key to profitability. There are two problems with this argument. First,

***...achieving this fundamental reversal in incentives requires major cultural change on the part of providers... this type of integration increases provider economic risk and thus uncertainty.***

achieving this fundamental reversal in incentives requires major cultural change on the part of providers — change that has proven highly challenging given the cultural legacy of a fee-for-service system. Second, this type of integration increases provider economic risk and thus uncertainty. The most significant risks for provider-sponsored insurance efforts are adverse selection within the community's risk pool and the difficulties in exerting economic discipline across a diffused and fragmented medical community. Risk assumption also increases uncertainty at the enterprise level because the enterprise is interacting with multiple markets with conflicting incentives at the same time.

There are numerous rationales for IDN sponsorship of insurance vehicles. Providers may develop insurance plans to jump-start population health management in the face of commercial insurers' reluctance to delegate risk to them. Captive insurance contracts might also result in replacement of revenues lost to provider payment cuts. Finally, captive insurance plans may expose plan subscribers to the provider system through the health benefit offering, helping increase hospital and physician market shares.

Of course, some of these aims could conceivably be accomplished with less enterprise risk by contracting with existing plans on a delegated-risk-basis. That depends crucially on the willingness of established health plans to delegate risk to providers. Insurers are aware that many providers embarked on this strategy (often unsuccessfully) in the 1990s as they developed physician-hospital organizations and salaried physician models to contract with health maintenance organizations (HMOs).

Health plan sponsorship by provider systems could help providers to compete with existing vertically integrated systems like Kaiser, limiting outflow of their patients to these closed models. Integration into insurance allows providers the flexibility to offer their own fully integrated insurance product (like Kaiser) and to contract with other health insurers on a delegated-risk basis (unlike Kaiser).

Vertical integration may also potentially increase bargaining power with other insurers in the local market. Offering employers a health plan endows the provider system with a Kaiser-like image (Burns and Thorpe, 1993). In addition, in-house insurance plans often promise but rarely deliver advantages to participating physicians of lessened intrusion of medical management activities and higher provider payment rates (Burns and Thorpe, 2001).

There has been a recent flurry of provider interest in either establishing health plans or assuming population health risk since the passage of the PPACA. One driver has been PPACA itself, which encouraged providers to establish ACOs to participate in the Medicare Shared Savings Program (MSSP) as well as to contract with insurers in the private sector. To date, there are well over 600 such ACOs in operation (Muhlestein, 2014).

## The Evidence on Physician-Hospital Integration

The literature on physician-hospital integration is replete with prescriptive models on how to organize the relationships between hospitals and physicians to bridge these historically independent sectors. The early integration literature emphasized the need for a set of common structures to align the two parties. These structures included physician-hospital organizations (PHOs), management services organizations (MSOs), independent practice associations (IPAs), foundation-style medical group models, and integrated salary models (ISMs).

There is little evidence that these structures, by themselves, have helped promote quality or reduce costs (Cuellar and Gertler, 2006; Madison, 2004; Ciliberto and Dranove, 2006); in fact, some relationships might run in just the opposite direction. Indeed, there is recent evidence that the growing absorption of physician practices into hospitals has resulted in higher hospital prices and spending (Baker, Bundorf and Kessler, 2014). One recent study of physician organizations in California reported that groups owned by local hospitals spend 10 percent more per patient than physician-owned groups; groups owned by multihospital systems spend nearly 20 percent more per patient (Robinson and Miller, 2014). The higher spending by hospital-owned groups covered inpatient, outpatient, pharmaceutical, and diagnostic services — suggesting there may be little cost-reducing coordination of care across the continuum of services in integrated models and/or greater utilization across the continuum. Hospital employment of physicians also is associated with lower physician productivity and higher operating costs among the physician practices. (Gans, 2012, Gans and Wolper, 2013.) There is also little evidence that other vehicles to integrate physicians with hospitals — whether through economic ties or non-economic ties — produced the expected benefits (Burns and Muller, 2008).

There is little evidence that different hospital-physician structures have much advantage in fostering alignment between the two parties that might translate into improved quality and reduced costs (Burns, Goldsmith, and Sen, 2013). While it seems clear that integration *structures* and *vehicles* are not sufficient, following Donabedian (1988), we might inquire whether the presence of intervening *processes* makes a difference for achieving outcomes. Research suggests that simply creating integrated structures without the enabling care management and governance processes may not translate into performance improvement (Burns et al., 2001).

The Health Systems Integration Study (HSIS) posited three forms of integration that relied upon process indicators and that formed a causal model of performance in hospital systems (Devers et al., 1994). The three forms were (1) functional integration — standardization of administrative activities across hospitals within a system; (2) physician-system integration — efforts to organize physicians into groups, efforts to tie them to the system in economic and administrative relationships, and standardization of medical staff activities across hospitals within the system; and (3) clinical integration — standardization of clinical activities (e.g., protocols, medical records, clinical support services, etc.) across hospitals within the system. This typology has been widely adopted in academic research.

***There is little evidence that different hospital-physician structures have much advantage in fostering alignment between the two parties that might translate into improved quality and reduced costs.***

However, the HSIS found little evidence during the 1990s that hospital systems had moved beyond the first form of integration, that one form of integration (e.g., physician-system) correlated with subsequent forms of integration (e.g., clinical processes), or that these forms of integration were consistently linked with improved financial performance of systems (Devers, et al., 1994; Gillies et al., 1994).

Subsequent work conducted by the HSIS researchers has focused on key elements of infrastructure in these integrated systems, such as clinical information technology (e.g., electronic medical records) and care management practices (CMPs). There is little evidence to date across all of their studies that these elements impact quality and cost in any meaningful or consistent manner (Burns, Goldsmith, and Sen, 2013).

The evidence suggests that Donabedian's (1988) stages of structure, process, and outcome are only loosely coupled together and not highly correlated in health care settings. One explanation for these results is that such models are too simplistic for explaining performance differences among firms. The health care integration literature is replete with lists of barriers to integration that strategies and structures do not anticipate and cannot easily overcome (Shortell et al., 1993; Burns and Muller, 2008). Moreover, the literature on organizational change suggests that effective implementation (i.e., execution) is much more important than strategy for subsequent success. This important but usually neglected observation was noted long ago by the HSIS researchers themselves (Gillies, Shortell, Devers et al., 1994).

## Provider-Insurance Integration

There is very little empirical research on the performance of provider integration with insurance vehicles. This may reflect the historically low and falling rate of provider sponsorship of health plans: since 2000, only 10-15 percent of hospitals participated in sponsoring an HMO and only 15-20 percent sponsored a preferred provider organization — both below the levels observed during the 1990s (data courtesy of Peter Kralovec, Health Forum, 2014). The lack of research may also reflect the paucity of data on both provider and health plan performance.

***One study of 36 large IDNs that contained hospitals, physicians, and health plans found that the more providers invested in their IDNs, the lower their operating margins. Moreover, as hospitals diversified into these different businesses, the larger was the negative impact on their financial position.***

One study of 36 large IDNs that contained hospitals, physicians, and health plans found that the more providers invested in their IDNs, the lower their operating margins. Moreover, as hospitals diversified into these different businesses, the larger was the negative impact on their financial position (e.g. higher debt to capitalization ratio). (Burns, Gimm, and Nicholson, 2005). A more recent study has found that integration of health plans with providers (hospitals or physician groups) to serve the Medicare Advantage population is associated with higher plan premiums (Frakt, Pizer, and Feldman, 2013).

Provider-sponsored insurance plans have faced similar fates regardless of whether they were formed by hospitals or physician groups (Burns and Thorpe, 2001). Common problems included poor capi-



talization, lack of actuarial and underwriting expertise, lack of consumer and employer marketing capabilities, the inability to reach a minimum efficient scale (i.e., enough enrollees), the inability to compete with much larger commercial insurers in the local market, and the tendency to enroll current patients who were poor risks (the adverse selection risk discussed previously).

The issue of scale is especially important. Prior research from the 1990s showed that the minimum efficient scale for health maintenance organizations was 100,000 enrollees (Given, 1996; Wholey, Feldman, Christianson et al., 1996). More recent evidence from McKinsey, likewise, suggests that sales, general and administrative costs for payers flatten out after reaching 100,000 lives (Singhal, 2013).

By contrast, health plans operated by providers are typically smaller in size. Recent statistics indicate there were 606 ACOs with roughly 18 million lives at the end of the fourth quarter in 2013 (Muhlestein, 2014). This yields an average enrollment of only 30,000 lives — well below the scale required to perform health-plan-like functions efficiently.

A further issue hampering provider-sponsored health plans is their tendency to build enrollment on their current patient base, which leads to unfavorable risk selection and higher medical loss ratios. McKinsey concluded there is no guarantee for value creation by payer-provider integration, particularly in the commercial market, since the costs incurred may outweigh the cost savings (Singhal, 2014).

A field study of six IDNs in Illinois found a different set of challenges facing providers who set up insurance vehicles. Primary among these was the difficulty in balancing the interests of the three parties in the IDN: hospitals, physicians, and health plan managers. This difficulty manifested itself in several ways, including conflicts over capital allocation across the three business lines, coordinating decision-making among the three businesses, and subsidizing one business (e.g., employed physicians) with revenues from the other two businesses (Burns, 1999).

## The Logic and Performance of Diversification

Diversification is defined as the expansion of the firm across product, geographic, and customer markets. Firms have traditionally relied on this strategy for one of three major goals: growth, risk reduction, and profitability. Commonly sought benefits include scope economies (via shared resources and capabilities across businesses), economies from internalized transactions, and improved access to market information (Grant, 2010). The benefits of scope economies are often referred to as synergies. Other rationales include the firm's effort to escape an increasingly unattractive market and to make effective use of surplus cash flows by investing them in more attractive products or services.

Despite decades of research, there is no solid evidence that either more diversified firms outperform less diversified firms or diversified firms outperform those that focus. One approach to resolve the conflicting findings suggested that diversification exhibited an inverse U-shaped relationship with performance, whereby firms with moderate levels of diversification outperformed those with much more or no diversification (Palich, Cardinal, and Miller, 2000). More recent evidence does not confirm this pattern, however (Besanko, Dranove, and Shanley, 2010).

A major contributor to the performance problem is that diversification increases the firm's size and complexity, which in turn increases the firm's cost of coordination, information processing, and governance and monitoring. Such costs likely increase with the unrelatedness of the new businesses

***...diversification increases the firm's size and complexity, which in turn increases the firm's cost of coordination, information processing, and governance/monitoring.***

operated by the firm. Corporate firms in the U.S. recognized this problem in the mid- to late-1980s when they unbundled themselves from prior conglomerate acquisitions and focused more on their core competence.

On the health plan side, Given (1996) and Wholey, et al. (1996) reported that HMOs suffered from scope diseconomies as they diversified from commercial to Medicare and Medicaid lines of business. On the hospital side, early evidence failed to show that diversification into alternate services improved operating performance (Clement, 1987) or that related diversification outperformed unrelated diversification (Clement, D'Aunno, and Poyzer, 1993). Evidence also showed few scope economies from hospitals operating both inpatient and outpatient lines of business (Cowing and

Holtman, 1983; Granneman, Brown, and Pauly, 1986).

More recent studies reported that hospital integration into health plans, capitated contracting, and non-hospital services were not associated with either clinical efficiency (shorter lengths of stay) or financial efficiency (lower charges per admission) (Lin and Wan, 1999). Conversely, evidence gathered during the debate over single-specialty hospitals failed to find greater efficiencies in focused factories compared to general medical-surgical hospitals (although the former did exhibit the same or higher level of patient satisfaction and quality of care) (Medicare Payment Advisory Commission, 2005; Centers for Medicare and Medicaid Services, 2005).

***...hospital integration into health plans, capitated contracting, and non-hospital services was not associated with either clinical efficiency (shorter lengths of stay) or financial efficiency (lower charges per admission).***

These results received additional confirmation in studies of hospitals with higher levels of specialization in cardiovascular care (Clark and Huckman, 2012). Finally, on the physician side, a recent review found few scope economies among group practices that take on a multispecialty mix of providers (Burns, Goldsmith, and Sen, 2013).

Taken together, these results suggest few or no scope economies within health plans, hospitals, and physician groups that diversify. It is therefore

difficult to see why there might be scope economies in health care organizations that link all of these components together. That is, can there really be synergies in linking together payers, hospitals, and physician groups when each has achieved no synergies in their own diversification efforts? Can the IDN whole really be greater than the sum of its constituent parts?

We conclude from this literature that hospital services, physician care, and health plan operations are very different business lines, with few assets and capabilities that can be shared across them to leverage savings and efficiencies. As a result, there may be little opportunity to reduce the average costs of each business as they become integrated with one another. Of course, it might be possible to achieve synergies by increasing the joint revenues of these different businesses (e.g., via coordinated branding and marketing strategies). However, with the exception of the Blue Cross plans, Kaiser, and a hand-

ful of prominent medical groups (Mayo, Cleveland Clinic), few payers or providers have achieved that type of brand image.

It is also possible to achieve synergies by sharing information and knowledge across the different business lines to achieve “spillovers” (e.g., improved ability to perform population health management). However, integration might just as easily lead to negative spillovers if the integration renders the different business lines more interdependent and thus more susceptible to negative shocks in any one line. Integration is also likely to consume excess capacity and other slack resources (e.g., as one line of business subsidizes another) that then make it difficult to take advantage of positive shocks and opportunities in the marketplace.

The Kaiser model includes all three lines of business (Kaiser Health Plan, Kaiser Hospitals, Permanente Medical Group). It is unique in that insurance premiums from its own “captive” product have been, until very recently, the sole source of income to the enterprise. Kaiser now charges copayments to individual patients through so-called consumer-directed products.

Because there are so few organizations like Kaiser, there is naturally little comparative data on its performance. There are occasional books and articles extolling the virtues of the Kaiser model, often written by Kaiser-affiliated researchers (Enthoven and Tollen, 2004; Crosson, 2005). There are also some consulting firm reports that suggest the superiority of the Kaiser model (Aon-Hewitt, 2011). Otherwise, there is no evidence that we know of that documents the competitive efficiency of the Kaiser model.

Indeed, during the 1980s and 1990s, Kaiser had difficulty exporting its own model to other parts of the U.S. beyond its native Pacific Coast market (Gitterman, Weiner, Domino et al., 2003). Ho (2008) analyzed some of the reasons for the limited market success (measured by growth and expansion) of vertically integrated health insurers such as Kaiser. She concluded that integrated plans like Kaiser need to reduce their per-member-per-month premiums to compensate enrollees for its limited network of hospitals and physicians. Such insurers are unlikely to have costs that are low enough to make such a strategy workable; instead, they must offer superior quality instead. The ability to attract enrollees based on superior quality is weakened, however, by the high quality offered by competitor plans as well as by information failures.

Robinson (2004) argued that such plans required four elements to succeed: multispecialty groups, capitated payment, exclusive payer-provider network linkages, and, crucially, a market framework that offered multiple choice of plans, defined contribution, and open enrollment. Many of these pieces are not prevalent across the U.S.; many are not found together in local markets; and some (multispecialty groups) are not increasing in prevalence.

Even if there were synergies between these three lines of business, researchers would be hard pressed to identify them. One major reason is what evaluation researchers call “multiple treatment interference.” This occurs when the same organization embarks on multiple strategies either at the same time (making it hard to disentangle their separate effects) or at different times (making it hard to control for the effects of the prior strategy (Campbell and Stanley, 1963). To disentangle these

effects and document them empirically, researchers will need data on the performance of all three business lines over time in a large sample of IDNs. Complicating the issue will be the tendency for IDNs to subsidize one business line with profits earned in others.

## IDN Financial/Performance Analysis

To study IDN performance, we selected 15 nationally prominent IDNs that are dominant actors in their respective metropolitan and regional hospital markets. We attempted to cover all regions of the U.S. (though three of the sample are in Pennsylvania).

The sample:

- Advocate Health Care (suburban Chicago)
- Banner Health (principally Arizona)
- Henry Ford Health System (Detroit)
- North Shore–LIJ Health System (suburban New York)
- Aurora Health Care (Milwaukee/Wisconsin)
- Intermountain Health Care (Utah/Idaho)
- Penn Medicine (Philadelphia)
- Sanford Health (Dakotas)
- Sentara Healthcare (Virginia)
- BayCare Health System (Tampa/St. Petersburg)
- Sutter Health (Northern California)
- UPMC (Western Pennsylvania)
- Geisinger Health System (Central Pennsylvania)
- Johns Hopkins Medicine (Maryland)
- Presbyterian Healthcare Services (New Mexico)

### Data Sources

When these IDNs, all of which are nonprofit, need to raise capital in public bond markets, they are required to make financial disclosures incident to the bond issuance, as well as continuing disclosures of their operating performance. These disclosures are archived online in EMMA (Electronic Municipal Market Archive) and maintained for the Municipal Securities Rulemaking Board. Those IDNs that operate health plans must disclose their operating performance to their state insurance commissions.

As nonprofit entities, IDNs are also required to disclose their income and expenditures to the U.S. Internal Revenue Service on Form 990. These forms detail charitable contributions, various forms of uncompensated care and community benefit, donations, certain operating expenditures by category, as well as executive and contractor compensation. These are lengthy filings, some over 200 pages, and depending on the IDN's corporate structure, multiple 990s are typically found. Like most tax returns, they provide an astonishing amount of information in great detail but of questionable usefulness for actually understanding the business.

These filings did not provide a complete picture of IDN finances. Only five of the sample’s disclosures were enterprise wide (e.g. IDN-wide) disclosures. Moreover, the 990s did not appear to tie in a consistent fashion to the IDN’s bond-related filings. Also, the latest available 990s were several years older than the latest available financial filings.

## Characteristics of Sample IDNs

Collectively, the 15 sample IDNs generated almost \$73 billion in total revenues and are in all cases the market-leading provider of hospital services in their home markets (see Exhibit 1). They range in size from a little over \$2 billion to over \$10 billion in annual gross collected revenue. They operate roughly 40,000 acute-care beds. Eight of the 15 operate in metropolitan hospital markets with a Herfindal-Hirschman Index (HHI) score (a quantitative measure of market concentration) above 2,500, a level characterized by the U.S. Justice Department as highly concentrated. Four of the IDNs operate the principal teaching hospitals of major academic health centers. Collectively, they employ almost 17,000 physicians and operate nine of the largest physician groups in the United States.

### Exhibit 1: IDN Resource Description

IDN	Licensed Beds	Market Conc. (HHI)	FTE Employed Physicians	Insured Lives
A	1,171	4,499	425	408,000
B	3,047	2,645	335	no health plan
C	2,231	5,669	1,369	81,000
D	1,638	n/a	1,055	429,135
E	1,712	600	1,598	no health plan
F	3,484	3,320	510	452,703
G	3,145	1,718	1,499	no health plan
H	2,784	3,399	1,153	529,000
I	1,897	1,279	n/a	342,264
J	4,831	3,849	794	47,000*
K	3,500	607	986	no health plan
L	2,657	1,209	n/a	no health plan
M	5,372	1,994	2,000	no health plan
N	5,397	3,118	1,631	n/a
O	5,086	3,027	3,400	2,223,869

\*ACO lives

Exhibit 2, shows that 10 of the 15 IDNs generate net operating income (operating profit) in excess of \$100 million in the sample year. In eight out of the 13 cases that reported community benefit in the aggregate, IDN net income exceeded reported community benefit (in a challenging period for IDN finances). They are wealthy organizations, nine of which have more than \$3 billion in deployable financial assets. The non-operating income generated by these financial assets serve an

important function in insulating the IDN from fluctuations in operating profitability. In seven cases, the sample IDNs reported non-operating (e.g. investment) earnings exceeding their operating profits.

## Exhibit 2: IDN Financials (Millions)

IDN	Net Revenue	Operating Income	Non-Operating Income	Net Income	Total Community Benefit	Financial Assets <sup>[1]</sup>	Long Term Debt	Reporting Year
A	\$2,051.9	\$63.2	\$135.7	\$198.9	\$76.6	\$1,721.4	\$583.9	2012
B	\$2,568.4	\$184.2	\$447.7	\$631.8	\$243.5	\$3,413.1	\$778.0	2013
C	\$3,105.9	\$30.8	-\$17.3	\$13.5	\$174.7	\$1,254.7	\$729.3	2013
D	\$3,355.1	\$163.3	\$13.8	\$177.2	\$215.6 <sup>[2]</sup>	\$2,576.6	\$909.2	2013
E	\$3,501.0	\$185.1	\$111.2	\$296.3	\$119.7 <sup>[2]</sup>	\$2,928.4	\$796.9	2013
F	\$4,068.2	\$263.8	\$167.6	\$431.4	\$282.2	\$3,247.8	\$960.2	2012
G	\$4,125.2	\$138.0	\$60.3	\$198.3	\$745.6 <sup>[2]</sup>	\$1,452.1	\$1,651.1	2012
H	\$4,251.6	\$364.6	\$347.6	\$712.2	\$188.2	\$5,117.8	\$1,184.9	2013
I	\$4,463.5	\$47.9	\$7.4	\$55.3	\$403.3	\$1,954.5	\$815.6	2012
J	\$4,878.2	\$289.5	\$311.1	\$600.6	\$432.9	\$4,364.0	\$2,359.4	2012
K	\$4,938.0	\$300.2	\$465.1	\$765.3	\$613.7 <sup>[3]</sup>	\$5,934.0	\$1,452.1	2013
L	\$4,959.8	\$175.8	\$174.5	\$350.3	n/a	\$3,156.3	\$1,488.3	2013
M	\$6,702.0	\$97.9	\$164.4	\$262.3	\$170.0	\$3,414.2	\$1,470.7	2013
N	\$9,649.0	-\$22.0	\$380.0	\$358.0	\$901.0	\$6,005.0	\$3,764.0	2013
O	\$10,188.4	\$143.3	\$219.1	\$362.4	n/a	\$5,038.8	\$3,096.0	2013

[1] Financial Assets comprise total assets less receivables, inventories and similar, and property, buildings, etc.

[2] Includes only charity care and the unpaid cost of Medicare and Medicaid

[3] Total Community Benefit for 2012

Eight of the 15 IDNs operate health plans, and two more either have significant capitated revenue from delegated-risk contracts with health plans and/or two-sided ACO arrangements (see Exhibit 3). Three of the sample IDNs that do not presently sponsor health plans are actively exploring establishing a health plan. Through these arrangements, the IDNs are presently at risk for the health costs of roughly 4.7 million covered lives. The percentage of the total IDN's revenues at risk range from zero for those IDNs with no health plans or capitation/ACO contracts, to as much as 62 percent. Four IDNs have at least one-third of their revenues at risk.

When one moves beyond the well-documented aggregate financial performance, however, large gaps in the publicly reported data on the various IDN businesses hamper further analysis. Unlike publicly traded hospital systems, it is almost impossible to determine from publicly available documents where in the IDNs' service portfolio their operating profits come from.

In particular, it is impossible to determine what profit contribution hospitals make to the IDN. In only five of the 15 IDNs is it possible to identify what percentage of their total system *revenues* come

from facilities, let alone from their hospitals. And in all cases, it is impossible to determine the contribution hospital operating profits make to overall IDN profits. In only five of the 15 is it possible to identify the physician group revenues, let alone their contribution to the IDN's profit.

How the IDNs' health plans compensate the IDNs' hospitals and physician groups is also impossible to determine from their filings. Footnotes to IDN financial filings do contain so-called eliminations that show the overlap between the IDN's insurance and provider businesses. When one subtracts documented health plan operating profits from the total IDN's operating profits, one is left with an aggregate profit figure for all the other businesses the IDN operates, some of which may, indeed, be subsidized by the rest. How system overhead is allocated among provider businesses is also impossible to determine from IDN filings.

### Exhibit 3: IDN Revenues by Line of Business

IDN	Net Revenue	Facilities Revenue	Facilities as % of Total Revenue	MD Group Revenue	Insurance <sup>[1]</sup> (Revenue At Risk)	Insurance as % of Total Revenue
A	\$2,051.9	n/a	n/a	n/a	\$1,268.1	61.8%
B	\$2,568.4	n/a	n/a	n/a	no health plan	n/a
C	\$3,105.9	n/a	n/a	n/a	\$144.3	4.6%
D	\$3,355.1	n/a	n/a	\$731.6	\$1,512.0	45.1%
E	\$3,501.0	\$2,891.1	82.6%	\$632.3	no health plan	n/a
F	\$4,068.2	\$2,724.8	67.0%	n/a	\$1,354.5	33.3%
G	\$4,125.2	n/a	n/a	n/a	no health plan	n/a
H	\$4,251.6	n/a	n/a	n/a	\$1,211.8	28.5%
I	\$4,463.5	n/a	n/a	n/a	\$2,153.7	48.3%
J	\$4,878.2	n/a	n/a	n/a	\$108.0	2.2%
K	\$4,938.0	n/a	n/a	n/a	\$769.3	15.5%
L	\$4,959.8	n/a	n/a	n/a	no health plan	n/a
M	\$6,702.0	\$6,099.5	91.0%	\$758.4	no health plan	n/a
N	\$9,649.0	\$6,070.0	62.9%	\$2,497.0	\$939.0	9.7%
O	\$10,188.4	\$5,582.4	54.8%	\$617.8	\$4,257.2	41.8%

[1] Insurance revenue includes premiums, capitation paid by other health plans, and double-sided ACO revenues.

Beyond system-level financial performance, publicly available quality or efficiency metrics are not aggregated at the IDN level. Thus, the only way to evaluate an IDN's performance along these dimensions is to query performance data on the individual hospitals it operates. We did not have the resources in this study to aggregate the published performance information across all the hospitals in the IDN's portfolio, and thus measure overall IDN performance against industry norms.

However, we obtained extensive performance information on the flagship hospital in the IDN's portfolio (often the original hospital that created the system) from numerous public sources:

Medicare’s Hospital Compare website, Leapfrog Group’s Safety Reports, Dartmouth Atlas’ extensive examination of hospital Medicare spending trends at the end of life, and the American Hospital Directory’s analysis of Medicare cost reports that detail individual hospital’s cost information.

We then compared performance indicators to those of the flagship hospitals’ most direct local competitor operating in the same geographic market. (See Appendix for listing of the flagship and competitor hospitals for each IDN). In some cases, these competitors were free-standing hospitals of comparable complexity (operated by a neighboring large integrated group practice or a large academic health center). In others, these were significant hospitals owned by regional or national multi-market hospital systems, such as Ascension Health, HCA, or Dignity Health. These comparisons were a rough attempt to normalize for local wage costs and payor mix, both of which might affect financial and clinical performance.

A central concern of this panel is whether market concentration has enabled hospital systems to extract quasi-monopoly rents from local insurance plans. Because we did not have access to private insurer claims payments in this analysis, it was impossible for us to answer this question.

However, we were able to analyze the relationship between market concentration in the IDN’s main hospital market and the IDN’s profits. As we mentioned earlier, the sample IDNs are dominant actors in their respective hospital markets. But IDN financial disclosures did not report hospital profits separately, so we were unable to comment upon the role hospital profits play in the overall profitability of the IDN.

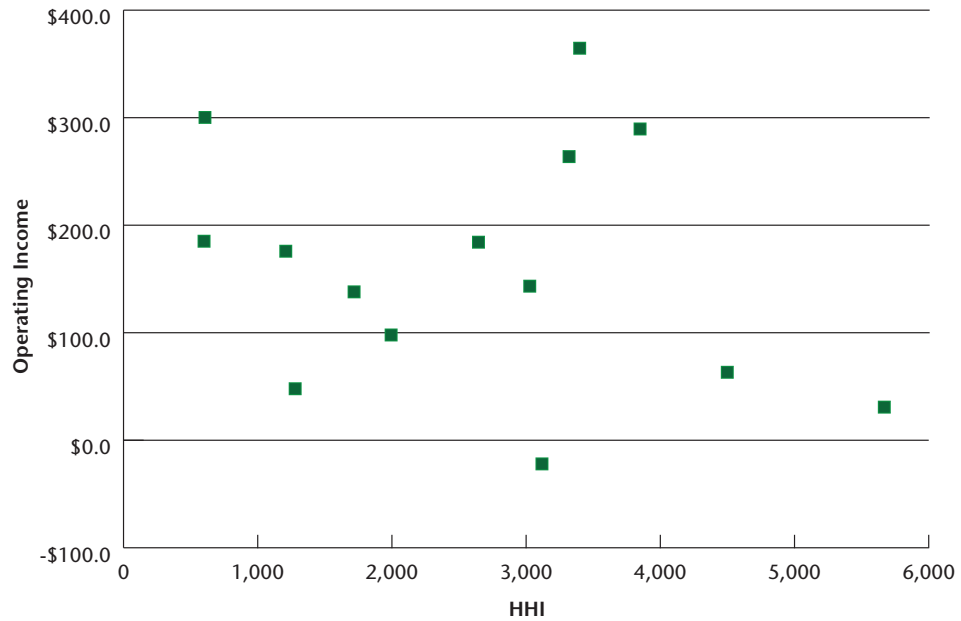
***...we found no relationship between HHI and overall IDN profitability, measured either by gross operating profits or operating profits as a percentage of operating revenues.***

***...whatever pricing benefits IDNs might derive from their hospitals’ dominant market positions do not appear to drop through to the IDN’s bottom line.***

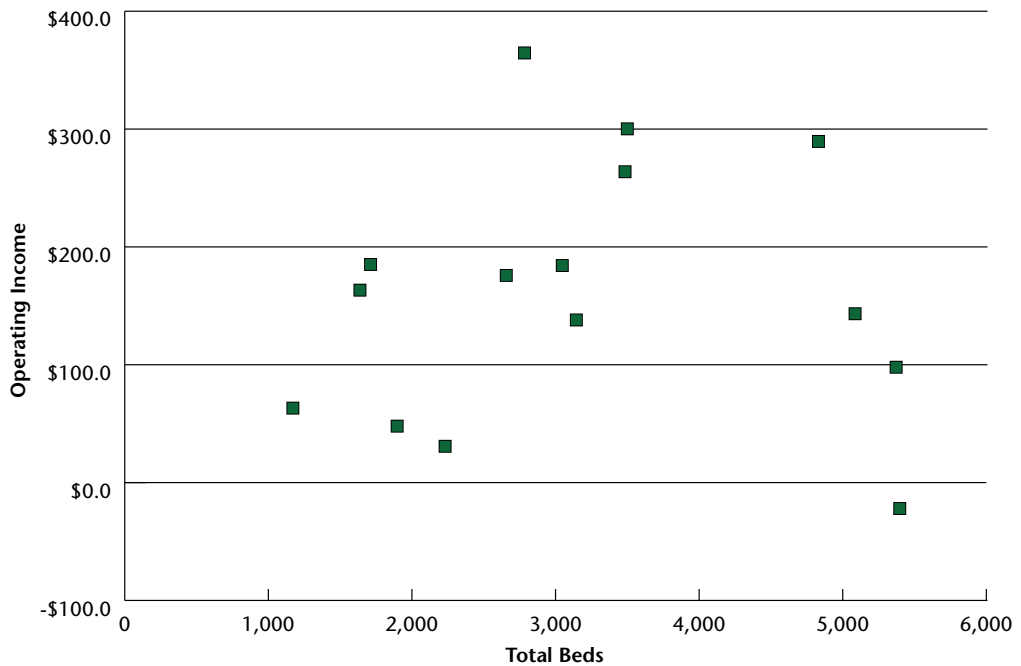
However, we found no relationship between HHI and overall IDN profitability, measured either by gross operating profits or operating profits as a percentage of operating revenues (see Exhibits 4 and 5). It may be that some IDNs are investing their hospital profits in other businesses that either lose money (physician groups, e.g.) or that create community benefits (research, education, etc.). But these internal funds flows are impossible to determine from their public disclosures. Our analysis suggests that whatever pricing benefits IDNs might derive from their hospitals’ dominant market positions do not appear to drop through to the IDN’s bottom line. There was also no relationship between the size of the IDNs’ bed complement and profitability, suggesting that merely having a lot of hospital beds did not automatically confer operating profit advantages (as some advocates of health system mergers have argued).



#### Exhibit 4: Operating Income v. HHI (\$ in Millions)



#### Exhibit 5: Operating Income v. Total Beds (\$ in Millions)



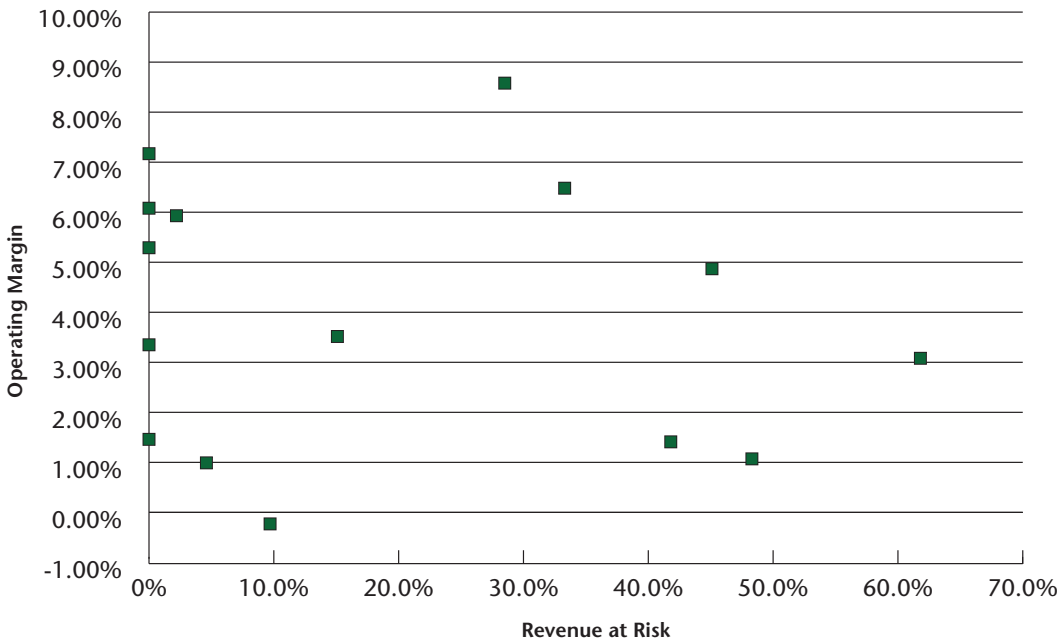
# Issues Related to the IDN Insurance Function

The interaction of the three main IDN businesses is, as Graham Greene would say, the heart of the matter. Recall the theory of the IDN: In the case of the exemplar, Kaiser, facilities and physicians are cost inputs whose expenses, along with those of contracted services provided by non-IDN providers, are subtracted from Kaiser’s pool of premium revenue to determine total system profits. Kaiser thus has a powerful economic interest in rationalizing the spending on clinical services within a fixed budget. This is the main attraction of this model of integrated care.

One could reasonably expect that the more revenue an IDN has at risk, the more incentive it has to manage down its provider spending. In the case of the eight IDNs that operate health plans, clinical services provided to the captive plans’ patients are an operating cost to the plan. How IDNs price their services to their own health plan (that is, the transfer price of services to internal subsidiaries) is a matter of considerable accounting discretion. But there is an upward limit on how generous the health plan can be to the IDN’s own providers and still be price competitive with the non-integrated health plans in their regional markets.

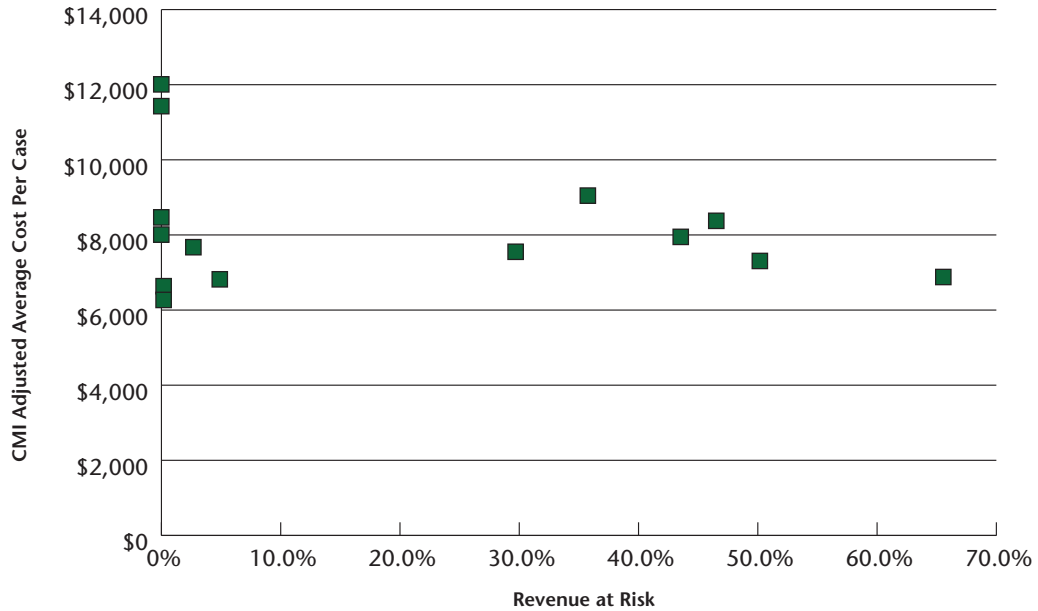
The strategic role the health plan plays in the IDN is complex and ambiguous. Does it function as a feeder to the IDN’s provider system or as a rationer of health services to the IDN’s insured lives, or, somehow, both? Is the IDN’s insurance risk held in the insurance captive or transmitted to the IDN’s provider units through population-based provider payment such as capitation? There is a powerful conflict between maximizing use of fixed provider capacity and being an effective risk-bearing clinical enterprise. How or even whether IDNs manage this conflict is the key to whether they save their customers, or the society, money. Because only a portion of these IDNs revenues are premium based, and the remainder of revenues come from open-ended forms of health care payment, there is no “fixed budget” to compel systemic savings.

**Exhibit 6: Operating Margin v. Revenue at Risk**



When we examined performance measures for IDNs, we found that the percentage of “revenue at risk” neither predicted overall IDN profitability (see Exhibit 6) nor the absolute Medicare Case Mix Index (CMI) adjusted cost of care at the IDN flagship institution (see Exhibit 7).

**Exhibit 7: Case Mix Index Adjusted Average Cost per Case v. Revenue at Risk**



We conducted a secondary analysis of the IDN’s “flagship” hospital Medicare cost per case (CMI adjusted) compared to its main in-market competitor and whether or not the IDN had *any* revenue at risk. What we found was that flagship hospitals within IDNs that have no revenue at risk are on average 10 percent less expensive than their in-market competitors, while flagships within IDNs that have some revenue at risk are on average 21 percent more expensive than their competitors. This finding is similar to one found in the literature review. If there is a cost of care advantage conferred on IDN hospitals by their owner operating a health plan, it was not apparent from this analysis.

***...flagship hospitals within IDNs that have no revenue at risk are on average 10 percent less expensive than their in-market competitors, while flagships within IDNs that have some revenue at risk are on average 21 percent more expensive than their competitors.***

It is worth noting here that we were unable to determine the role that a flagship hospital plays in the IDN, clinically or financially. In some cases, the flagship was the historic source of free cash flow and also debt used to build the rest of the IDN. In other cases, the flagship was the asset the system’s strategy and resource allocation was meant to protect, because it houses the majority of the IDNs research and education activities. How IDNs allocate system overhead among their hospitals or other IDN components is also not knowable based on public disclosures.

We found no meaningful differences in clinical quality or safety scores (readmissions, infection, or complication rates) or consumer satisfaction scores between the IDN flagships and their direct in-market competitors. In the Leapfrog Group’s recent hospital safety ratings, of the 12 pairs where comparative data were available, seven flagships got the same rating as their competitor, three were higher and two lower. There were six “A” rated flagships and three with a “C” safety rating.

However, IDN flagships have higher per-case costs and spend more at the end of life than their in-market competitors. The Dartmouth Atlas has studied extensively how individual hospitals treat patients in the last two years of life. Resources measured include all health spending for patients attributed to the hospital, not just the hospital’s own service spending. To us, total spending in the last two years of life is a measure of the degree of cultural restraint exerted by a medical community on resource consumption. In the last two years of life, patients often undergo significant health crises, and family members often exert pressure on the health system to do “whatever it takes” to help their relative in trouble.

**...in 10 of 14 cases where comparative data were available, the IDN flagship had higher CMI adjusted Medicare cost per case than its in-market competitor.**

**In the Dartmouth analyses of total spending in the last two years of life, in 12 of the 15 comparisons available, the IDN flagship showed higher levels of health care spending (for services both inside and outside the system) than their in-market competitor.**

Thus, variation in spending in the last two years of life provides an excellent window into the culture of the medical community that uses a hospital and how effectively the hospital is in coordinating that person’s care. In general, we believe that controlling the total cost of care, whether per episode or for specific populations of interest over a time period, is the best aggregate measure of IDN performance.

As can be seen from Exhibit 8, in 10 of 14 cases where comparative data were available, the IDN flagship had higher CMI-adjusted Medicare cost per case than its in-market competitor. This is despite the fact that in four of those cases, the competitor had a higher Medicare CMI, a rough measure of service intensity.

In the Dartmouth analyses of total spending in the last two years of life, in 12 of the 15 comparisons available, the IDN flagship showed higher levels of health care spending (for services both inside and outside the system) than its in-market competitor. This was despite the fact that in five of the 12 cases, the competitor hospital had a higher Medicare CMI. In 11 of the 15 paired comparisons, IDN flagships had higher imaging spending, while 12 had higher testing expenditures. These Dartmouth spending figures are not case-mix adjusted and do not reflect the socio-economic status or pre-existing health status of the patients cared for.

The higher flagship care costs were an unexpected finding given that one major presumed advantage of IDNs is their capability to coordinate care. Presumably, this would be reflected in lower levels of spending on care at

the end of life. We did not have the time or resources to perform other paired-comparison analyses. Several readers have suggested that comparing the IDNs’ *suburban* hospitals with their direct in-market competitors would have been useful and might have produced more pronounced cost differences than we found in analyzing their flagships. This analysis would provide valuable additional evidence on the question of IDN efficiency.

## Exhibit 8: IDN Performance: Flagship Compared to Competitor

### Medicare Spending per Decedent in Last Two Years of Life

Hospital	Case Mix Index (CMI)	CMI-Adjusted Avg. Cost per Case	Total	Imaging	Tests
A Flagship	1.62	\$7,109	\$66,009	\$1,157	\$801
A Competitor	1.94	\$6,926	\$62,216	\$961	\$756
B Flagship	1.57	\$6,448	\$92,733	\$1,642	\$1,214
B Competitor	2.13	\$9,160	\$92,208	\$1,613	\$1,174
C Flagship	1.81	\$6,902	\$64,618	\$743	\$1,064
C Competitor	1.76	\$6,877	\$48,870	\$572	\$483
D Flagship	1.73	\$8,501	\$68,185	\$748	\$511
D Competitor	1.73	\$5,713	\$62,912	\$759	\$795
E Flagship	2.32	\$11,110	\$101,616	\$1,636	\$1,048
E Competitor	1.80	\$10,241	\$99,024	\$2,095	\$980
F Flagship	2.02	\$9,069	\$69,121	\$944	\$810
F Competitor	1.67	\$5,455	\$64,231	\$789	\$924
G Flagship	1.79	\$6,809	\$89,378	\$1,088	\$1,205
G Competitor	2.02	\$9,069	\$76,146	\$780	\$760
H Flagship	1.74	\$7,267	\$64,854	\$838	\$758
H Competitor	1.83	\$5,737	\$69,968	\$1,027	\$734
I Flagship	1.73	\$7,236	\$93,928	\$991	\$687
I Competitor	1.63	\$6,128	\$92,667	\$1,242	\$1,018
J Flagship	1.97	\$7,659	\$94,221	\$1,708	\$1,129
J Competitor	2.25	\$8,343	\$96,122	\$1,705	\$1,017
K Flagship	1.63	\$8,269	\$102,392	\$1,652	\$1,178
K Competitor	1.58	\$7,703	\$87,546	\$1,216	\$1,137
L Flagship	1.88	\$12,110	\$136,069	\$1,416	\$810
L Competitor	2.27	\$11,309	\$120,501	\$1,377	\$799
M Flagship	1.69	\$8,770	\$105,042	\$2,293	\$2,102
M Competitor	1.75	\$9,654	\$103,254	\$2,176	\$1,787
N Flagship	n/a	n/a	\$83,948	\$1,693	\$1,169
N Competitor	2.22	\$9,041	\$80,524	\$1,264	\$786
O Flagship	2.13	\$8,140	\$86,281	\$1,180	\$891
O Competitor	2.21	\$6,509	\$87,059	\$1,134	\$630

Sources: American Hospital Directory, 2012, Dartmouth Atlas, 2010

# Discussion

The 15 IDNs are formidable presences in their markets; frequently, they are the largest employer in their communities. They are highly complex operationally. Some of the finest medicine in the world is practiced in these IDN hospitals. They have capable managements, and many have produced important systemic innovations. Examples include “intelligent” computerized physician order entry and the clinical quality improvement methods developed at Intermountain Health Care, remote ICU monitoring systems developed at Johns Hopkins and beta tested at Sentara, and complex care management protocols developed at Geisinger.

However, IDNs are also inscrutable institutions. Though they make financial disclosures to their bondholders, in only about a third of them is it possible to determine what contribution their various provider services make to their operating revenues, let alone to their profitability. It is thus impossible to answer the question on the minds of this panel: whether these enterprises have used their market power in hospital or physician services to grow their hospital earnings. As we discussed, however, overall IDN profits were not higher in highly concentrated hospital markets. However, our single-year snapshot of performance indicators is no substitute for a multi-year analysis, as 2012 and 2013 were difficult years for many IDNs.

We were unable, given limited time and resources, to analyze comparative pricing information at any level (IDN or flagship) to give us a sense of how much these organizations are paid for their services versus their competitors. That is a task worthy of more detailed analysis. We would include a look at the IDNs’ smaller hospitals paired against their competitors to make broader generalizations possible.

The interpenetration of IDNs’ provider and insurance businesses add an additional layer of complexity. What strategic role does insurance play in the IDN portfolio? Is it a risk vehicle that protects consumers and employers from excessive health costs? Or is it a marketing vehicle to bolster the IDN’s provider market position and help fill its beds and clinic schedules? Or, somehow, both? And how price competitive are the IDNs health plan premiums compared to health plans that do not own provider capacity? This question was beyond the scope of our analysis.

And then there is the added layer of complexity introduced by how the IDN prices its provider services to its captive health plan? Does the IDN underprice internal provider services to grow market share in the insurance market and generate health insurer net income, or does it mark up the prices for internally provided services (as the insurance market allows) to increase provider incomes? Again, this is impossible to determine by analyzing IDN public filings.

There are complex societal efficiency questions. Are IDN-provided hospital, physician, and other services less costly or of demonstrably better quality because they come from an integrated entity rather than from a network of less integrated competitors? We could find no evidence from IDNs’ public disclosures or publicly available information to support these claims. IDN clinical quality performance measures are not aggregated at the enterprise level. What analyses we were able to conduct at the flagship-competitor level suggested that while there were no measureable qualitative differences,

IDN flagships were more expensive than their major competitors both on a Medicare cost-per-case and on a total-cost-of-care basis, at least for patients at the end of life.

Are the disclosures we analyzed adequate to understand fully the risks IDN's run in operating in multiple markets with conflicting incentives? We do not believe they are. The disclosures are notably less illuminating than the reporting required by publicly traded hospital operators, which contain such useful metrics as salary and benefits as a percentage of operating expenses, adjusted hospital admissions and outpatient volumes, and supplies as a percentage of operating costs, provided on a quarterly basis.

There has been a single, spectacular failure of an IDN in recent history — the 1998 bankruptcy of the Pennsylvania-based Allegheny Health Education and Research Foundation (AHERF). Despite ample warning signs of impending difficulty, and a catastrophic failure of accountability and oversight over billions of dollars in bonds, AHERF's collapse did not lead to meaningful tightening of IDN financial oversight by the investment community (Burns et al., 2000). The AHERF failure did, however, raise the issue of the quality and effectiveness of IDN governance to investor attention.

To reiterate a point made earlier, assumption of premium risk, as well as vertical integration by IDNs into very large, dispersed physician enterprises, both increase financial risks to IDN bondholders. Present levels of financial disclosure are, in our opinion, inadequate to fully evaluate these risks. IDN insurance performance is reported separately to state insurance commissions, but this performance is not meaningfully relatable to the performance of the IDN's other businesses.

***What analyses we were able to conduct at the flagship-competitor level suggested that while there were no measureable qualitative differences, IDN flagships were more expensive than their major competitors both on a Medicare cost-per-case and on a "total-cost-of-care" basis, at least for patients at the end of life.***

## Policy Recommendations

We believe far more detailed and uniform voluntary financial and operating disclosures to bond holders would enable the analysts who follow these securities to understand the contribution to profit (if any) of all the major IDN businesses, as well as the transfer pricing strategies that affect inter-company sharing of revenues. Providing this more comprehensive information is in the interests of IDNs as well as financial markets, the health policy community, and society at large. Transparency and voluntary disclosure by the IDNs themselves is vastly preferable to disclosure required by regulatory mandates.

The two crucial disclosures, in our view, are the sources and amount of hospital operating profit and the IDN physician compensation policies. How IDNs allocate overhead and ancillary services income between the three main lines of business should also be disclosed, under standards voluntarily established by IDNs themselves. An IDN that generates 95 percent of its profits from its hospitals is probably not in the population health business. Neither is an organization that pays its physicians on

a relative value unit compensation model where they earn more by ordering more tests, or where they receive a share of the ancillary income they generate.

It should also be possible to determine from an IDN disclosure if capitated risk is transmitted from the IDN's health plan or risk-accepting organization to its hospitals, but particularly to its physicians. If the risk is retained in the health plan, and the hospitals and physicians continue being paid on a volume-enhancing compensation scheme (per diem, per case, per test, per visit), the IDN is not in the population health business.

Further, to address directly the issue of the effect of IDN market power on pricing, we believe a national all-payer claims data base, perhaps building on the work of the Health Care Cost Institute (HCCI), would be an invaluable resource in evaluating the market effects of IDNs. HCCI's database does not presently contain data from the nation's Blue Cross plans that, in many states, dominate health insurance markets. Bringing those data together with HCCI's data would provide far more illumination of the societal benefits that are created by IDNs and address the question of whether IDNs are exploiting their market power in hospital or physician markets to charge excessive prices for key services.

We believe the likelihood that IDNs are producing neither cost nor quality advantages over dispersed networks of caregivers assembled by health plans raises serious policy questions regarding the reliance upon ACOs as a contracting model by Medicare or private insurers. The latest growth spurt in IDN formation has been stimulated in major part by the quasi-risk contracting model embodied in ACOs.

If the intended end state for regular Medicare payment is full-risk contracting with IDNs, and present day IDNs do not display either increased operating efficiency or lower total cost of care compared to community-based alternatives, policymakers need to find another payment approach. What they may be stimulating instead of improved health and cost moderation is the locking down of hospital and physician markets that led to the creation of the NASI panel in the first place.

## Conclusion

Integrated delivery networks contain some of the nation's leading hospitals and medical care professionals. They have produced systemically important clinical and management innovations and generate significant community benefits. This report is not intended to denigrate these fine institutions or their clinicians and managements but rather to raise questions about the mode of health care organization that they collectively represent. IDNs have also operated under a halo of presumed societal benefits (quality, efficiency, care integration, etc.) for the better part of four decades with remarkably little evidence that these benefits in fact exist.

It is still possible that these societal benefits of IDNs exist. But if they do, given the opacity of present IDN disclosure of key operating information, they eluded us in this preliminary investigation. If public policy is to continue fostering IDN growth and development, a more solid evidentiary foundation for this form of medical care organization seems essential. The mere presumption of societal benefits of IDN formation or operations is no longer tenable as a policy principle.



# References

- Aon Hewitt. Letter to Mitchell Goodstein (March 18, 2011). Available online at: [http://www.pimsmultimedia.com/images/Hewitt%20KFHP\\_2010\\_HHVI\\_Study\\_MAS\\_03\\_18\\_2011.pdf](http://www.pimsmultimedia.com/images/Hewitt%20KFHP_2010_HHVI_Study_MAS_03_18_2011.pdf). Accessed on August 5, 2014.
- Baker, L., Bundorf, J., and Kessler, D. (2014). Vertical integration: Hospital ownership of physician practices is associated with higher prices and spending. *Health Affairs* 33(5): 756-763.
- Besanko, D., Dranove, D., Shanley, M. (2010). *Economics of Strategy*. Fifth Edition. Hoboken, N.J.: John Wiley and Sons.
- Betbeze, P. (2013). The benefits (and costs) of consolidation. *HealthLeaders*, accessed at: <http://www.healthleadersmedia.com/content/MAG-297230/The-Benefits-and-Costs-of-Consolidation>. Accessed November 26, 2014
- Brookings Institution. (2013). *Bending the curve*. (Washington, D.C.; Brookings Institution).
- Budetti, P. P., Shortell, S. M., Waters, T. M., Alexander, J. A., Burns, L. R., Gillies, R. R., and Zuckerman, H. (2002). Physician and health system integration. *Health Affairs*, 21(1): 203-10.
- Burns, L. R., (1999). Polarity management: The key challenge for integrated health systems. *Journal of Healthcare Management* 44(1): 14-31.
- Burns, L. R., Cacciamani, J., Clement, J., and Aquino, W. (2000). The fall of the house of AHERF: The Allegheny bankruptcy. *Health Affairs* 19(1): 7-41.
- Burns, L. R., Gimm, G., and Nicholson, S. (2005). The financial performance of integrated health organizations. *Journal of Healthcare Management* 50(3): 191-211.
- Burns, L. R., Goldsmith, J., and Muller, R. (2010). *History of hospital/physician relationships: Obstacles, opportunities, and issues*. In J. Crosson and L. Tollen (Eds.), *Partners in Health* (pp. 18-45). San Francisco, CA: Jossey-Bass.
- Burns, L. R., Goldsmith, J. C., and Sen, A. (2013). Horizontal and vertical integration of physicians: A tale of two tails, in J. Goes, G.T. Savage, L. Friedman (ed.) *Annual Review of Health Care Management: Revisiting the Evolution of Health Systems Organization (Advances in Health Care Management, Volume 15)* (pp. 39-117). Emerald Group Publishing Limited.
- Burns, L. R., and Muller, R. W. (2008). Hospital-physician collaboration: Landscape of economic integration and impact on clinical integration. *Milbank Quarterly*, 86(3): 375-434.
- Burns, L. R., and Pauly, M. V. (2002). Integrated delivery networks: A detour on the road to integrated care? *Health Affairs*, 21(4): 128-43.
- Burns, L. R., and Thorpe, D. P. (1993). Trends and models in physician-hospital organization. *Health Care Management Review* 18(4): 7-20.
- Burns, L. R., and Thorpe, D. P. (2000). Why provider-sponsored health plans don't work. *Healthcare Financial Management*, suppl: 12-6.
- Burns, L. R., and Thorpe, D. P. (2001). Why provider-sponsored health plans don't work. *Healthcare Financial Management Resource Guide*: 12-16.
- Burns, L. R., Walston, S., Alexander, J. A., Zuckerman, H. S., Andersen, R. M., and Torrens, P. (2001). Just how integrated are integrated delivery systems? Results from a national survey. *Health Care Management Review*, 26(1): 22-41.
- Campbell, D., and Stanley, J. (1963). *Experimental and Quasi-Experimental Designs for Research*. Chicago: Rand McNally.
- Centers for Medicare and Medicaid Services. (2005). *Study of Physician-owned Specialty Hospitals Required in Section 507(c)(2) of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003*. Washington, D.C.: CMS.

- Ciliberto, F., and Dranove, D. (2006). The effect of physician-hospital affiliations on hospital prices in California. *Journal of Health Economics* 25: 29-38.
- Clark, J., and Huckman, R. (2012). Broadening focus: Spillovers, complementarities, and specialization in the hospital industry. *Management Science* 58(4): 708-722.
- Clement, J. (1987). Does hospital diversification improve financial outcomes? *Medical Care* 25(10): 988-1001.
- Clement, J., D'Aunno, T., and Poyzer, B. (1993). The financial performance of diversified hospital subsidiaries. *Health Services Research* 27(6): 741-763.
- Coddington, D. C., and Moore, K. D. (1994). Costs and benefits of integrated healthcare systems. *Healthcare Financial Management* 48(3): 20.
- Conrad, D. A., and Dowling, W. L. (1990). Vertical integration in health services: Theory and managerial implications. *Health Care Management Review* 15(4): 9-22.
- Conrad, D. A., and Shortell, S. M. (1996). Integrated health systems: Promise and performance. *Frontiers of Health Services Management* 13(1): 3-40.
- Cowing, T., and Holtman, A. (1983). Multiproduct short-run hospital cost functions: Empirical evidence and policy implications from cross-section data. *Southern Economic Journal* 49(2): 637-653.
- Crosson, J. (2005). The delivery system matters. *Health Affairs* 24(6): 1543-1548.
- Crosson, J. and Tollen, L. (Eds.). (2010). *Partners in Health*. San Francisco, CA: Jossey-Bass (2010).
- Cuellar, A. E., and Gertler, P. J. (2006). Strategic integration of hospitals and physicians. *Journal of Health Economics* 25(1): 1-28.
- Devers, K. J., Shortell, S. M., Gillies, R. R., Anderson, D. A., Mitchell, J. B., and Erickson, K. L. M. (1994). Implementing organized delivery systems: An integration scorecard. *Health Care Management Review* 19(3): 7-20.
- Donabedian, A. (1988). The quality of care: How can it be assessed? *Journal of the American Medical Association* 260(12): 1743-1748.
- Dranove, D., Simon, C., and White, W. (2002). Is managed care leading to consolidation in health care markets? *Health Services Research* 37(3): 573-594.
- Enthoven, A. C. (2009). Integrated delivery systems: The cure for fragmentation. *American Journal of Managed Care* 15: S284-90.
- Enthoven, A., and Tollen, L. (Eds.). (2004). *Toward a 21st Century Health System* (San Francisco: Jossey-Bass).
- Frakt, A. B., Pizer S. D., and Feldman R. (2013). Provider-plan integration, premiums and quality in the Medicare Advantage market. *Health Services Research* 48(6): 1996-2013.
- Gans, D. (2012). Perspective is everything: Look beyond reported losses. *MGMA Connexion* 12(10): 17-19.
- Gans, D., Wolper, L. (2013). Management makes the difference: Optimizing medical group performance. *ACMPE Executive View* (Spring): 14-18.
- Gaynor, M. (2006). Is vertical integration anti-competitive? Definitely maybe (but that's not final). *Journal of Health Economics* 25(1): 175-180.
- Gaynor, M., and Haas-Wilson, D. (1999). Change, consolidation, and competition in health care markets. *Journal of Economic Perspectives* 13(1): 141-64.
- Gillies, R. R., Shortell, S. M., Devers, K. J., Anderson, D. A., Mitchell, J. B., and Morgan, K. L. (1994). The correlates and consequences of clinical integration in organized delivery systems. Paper presented at Annual Meeting of Association for Health Services Research, San Diego (CA), June.
- Gitterman, D., Weiner, B., Domino, M., et al. (2003). The rise and fall of a Kaiser Permanente expansion region. *Milbank Quarterly* 81(4): 567-601.

- Given, R. (1996). Economies of scale and scope as an explanation of merger and output diversification activities in the health maintenance organization industry. *Journal of Health Economics* 15(6): 685-713.
- Granneman, T., Brown, R., and Pauly, M. V. (1986). Estimating hospital costs: A multiple output analysis. *Journal of Health Economics* 5(2): 107-127.
- Grant, R. (2010). *Contemporary Strategy Analysis – 7th Edition*. New York: John Wiley.
- Ho, K. (2008). Barriers to entry of a vertically integrated health insurer: An analysis of welfare and entry costs. Department of Economics, Columbia University.
- Lin, B., and Wan, T. (1999). Analysis of integrated healthcare networks' performance: A contingency-strategic management perspective. *Journal of Medical Systems* 23(6): 467-485.
- Madison, K. (2004). Hospital-physician affiliations and patient treatments, expenditures, and outcomes. *Health Services Research* 39(2): 257-278.
- Medicare Payment Advisory Commission. (2005). Report to the Congress: Physician-Owned Specialty Hospitals. Washington, D.C.: MedPAC.
- Muhlestein, D. (2014). Accountable care growth: A look ahead. *Health Affairs Blog* (January 29, 2014).
- Palich, L., Cardinal, L., and Miller, C. (2000). Curvilinearity in the diversification-performance linkage: An examination of over three decades of research. *Strategic Management Journal* 21: 155-174.
- Peters, G. R. (1991). Integrated delivery can ally physician and hospital plans. *Healthcare Financial Management*, 45(12): 20-32.
- Robinson, J. C. (2004). The limits of prepaid group practice. In A. Enthoven and L. Tollen (Eds.), *Toward a 21st Century Health System* (San Francisco: Jossey-Bass). Chapter 10: 199-212.
- Robinson, J. C., and Casalino, L. P. (1996). Vertical integration and organizational networks in health care. *Health Affairs* 15(1): 7-22.
- Robinson, J. C., and Miller, K. (2014). Total expenditures per patient in hospital-owned and physician-owned physician organizations in California. *JAMA* 312 (16): 1663-1669.
- Shortell, S. M., Gillies, R. R., Anderson, D. A., Mitchell, J. B., and Morgan, K. L. (1993a). Creating organized delivery systems: The barriers and facilitators. *Hospital and Health Services Administration* 38(4): 447-466.
- Shortell, S. M., Gillies, R. R., and Anderson, D. A. (1994). The new world of managed care: Creating organized delivery systems. *Health Affairs* 13(5): 46-64.
- Shortell, S. M., Anderson, D. A., Gillies, R. R., Mitchell, J. B., and Morgan, K. L. (1993b). The holographic organization. *The Healthcare Forum Journal* 36(2): 20-26.
- Shortell, S. M., Gillies, R. R., Anderson, D. A., Erickson, K. M., and Mitchell, J. B. (2000). Integrating health service delivery. *Health Forum Journal* 43(6): 35-39.
- Singhal, S. (2013). Bigger may not be better: Does scale matter for payors? *Health Affairs Blog* (November 15).
- Singhal, S. (2014). Payers in care delivery: When does vertical integration make sense? *Health Affairs Blog* (February 5).
- Town, R., Wholey, D., Feldman, R., and Burns, L. (2007). Revisiting the relationship between managed care and hospital consolidation. *Health Services Research* 42(1): 219-238.
- Walston, S. L., Kimberly, J. R., and Burns, L. R. (1996). Owned vertical integration and health care: Promise and performance. *Health Care Management Review* 21(1): 83-92..
- Wholey, D., Feldman, R., Christianson, J., and Engberg, J. (1996). Scale and scope economies among health maintenance organizations. *Journal of Health Economics* 15(6): 657-684.

# Appendix: IDN Flagship Hospitals and their Competitors

<b>TARGET INSTITUTIONS</b>	<b>FLAGSHIP HOSPITAL</b>	<b>COMPETITOR INSTITUTION</b>
Advocate Health Care	Advocate Lutheran General Hospital	Northwest Community Hospital
Aurora Health Care	Aurora St. Luke's Medical Center	Froedtert Memorial Community Hospital
Banner Health Care	Banner Good Samaritan Medical Center	St. Joseph's Hospital and Medical Center
BayCare Health System	St. Joseph's Hospital	Tampa General Hospital
Geisinger Health System	Geisinger Medical Center	Robert Packer Hospital
Henry Ford Health System	Henry Ford Hospital – Detroit	St. John Hospital and Medical Center
Intermountain Healthcare	LDS Hospital	St. Mark's Hospital
Johns Hopkins Health System	Johns Hopkins Hospital	University of Maryland Medical Center
North Shore–LIJ Health System	North Shore University Hospital–Manhasset	Winthrop-University Hospital
Penn Medicine	Hospital of the University of Pennsylvania	Thomas Jefferson University Hospital
Presbyterian Healthcare Services	Presbyterian Hospital	Lovelace Medical Center – Downtown
Sanford Health	Sanford Medical Center Fargo	Essentia Health
Sentara Healthcare	Sentara Norfolk General Hospital	Riverside Regional Medical Center
Sutter Health	Sutter Medical Center, Sacramento	Mercy General Hospital
UPMC	UPMC Presbyterian	Allegheny General Hospital





NATIONAL  
ACADEMY  
OF SOCIAL  
INSURANCE

1200 New Hampshire Avenue, NW Suite 830 ■ Washington, DC 20036  
(202) 452-8097 ■ (202) 452-8111 Fax  
nasi@nasi.org ■ www.nasi.org

# Top of Form

## CON-Certificate of Need State Laws

8/25/2016

### Table of Contents

- [CON Programs](#)
- [Regulated service, by state](#)
- [CON Moratoria](#)
- [CON Laws | Court case](#)
- [Resources & reports](#)

Certificate of Need (C.O.N.) programs are aimed at restraining health care facility costs and facilitating coordinated planning of new services and facility construction. Many "CON" laws initially were put into effect across the nation as part of the federal "Health Planning Resources Development Act" of 1974. Despite numerous changes in the past 30 years, most states retain some type of CON program, law or agency as of 2016.

### INTENT AND STRUCTURE OF CON

The basic assumption underlying CON regulation is that excess capacity stemming from overbuilding of health care facilities results in health care price inflation. Price inflation can occur when a hospital cannot fill its beds and fixed costs must be met through higher charges for the beds that are used. Bigger institutions generally have bigger costs, so CON supporters say it makes sense to limit facilities to building only enough capacity to meet actual need or demand.

CON programs originated to regulate the number of beds in hospitals and nursing homes and to prevent purchasing more equipment than necessary. Mandatory regulation through health planning agencies determined the most urgent health care needs, contributed to solutions for these needs and attempted to manage the fluctuations in prices often found in a competitive market. The intent was that new or improved facilities or equipment would be approved based primarily on a community's genuine need. Statutory criteria often were created to help planning agencies decide what was necessary for a given location. By reviewing the activities and resources of hospitals, the agencies made judgments about what needed to be improved. Once need was established, the applicant organization was granted permission to begin a project. These approvals generally are known as "Certificates of Need."

### HISTORY

The first national law related to this issue was the Hill-Burton Act in 1946, which was intended to control increase the supply of medical facilities in the country.



In 1964, New York became the first state to enact a statute granting the state government power to determine whether there was a need for any new hospital or nursing home before it was approved for construction. In 1974, the federal government tied funding to CON programs. The 1974 federal Act required all 50 states to have structures involving the submission of proposals and obtaining approval from a state health planning agency before beginning any major capital projects such as building expansions or ordering new high-tech devices. By 1975, 20 states had enacted CON laws; by 1978, 36 states had enacted them. Eventually, all states except Louisiana enacted such laws.

The federal mandate was repealed in 1987, along with the associated federal funding. In the decade that followed,

- **14 states discontinued** their CON programs. New Hampshire was the most recent repeal, effective 2016.
- **34 states currently maintain some form of CON program.** Puerto Rico, the US Virgin Islands and the District of Columbia also have CON programs.
- 3 states have variations, noted on the map and list below.

States that have retained CON programs currently tend to concentrate activities on outpatient facilities and long-term care. This is largely due to the trend toward free-standing, physician owned facilities that constitute an increasing segment of the health-care market.

#### **Arguments in Favor of CON Laws**

- Health care cannot be considered as a “typical” economic product.
- Most health services (like an x-ray) are “ordered” for patients by physicians, patients do not “shop” for these services the way they do for other commodities.
- The American Health Planning Association (AHPA) argues that CON programs limit health-care spending. CON programs can distribute care to areas that could be ignored by new medical centers.
- CON requirements do not block change, they mainly provide for an evaluation, and often include public or stakeholder input.

#### **Arguments Against CON Laws**

- By restricting new construction, CON programs may reduce price competition between facilities and keep prices high.
- Some changes in the Medicare payment system (such as paying hospitals according to Diagnostic Related Groups – “DRGs”) may make external regulatory controls unnecessary by sensitizing health care organizations to market pressures.
- CON programs are not consistently administered.
- Health facility development should be left to the economics of each institution rather than being subject to political influence.
- Some evidence suggests that lack of competition encourages construction and additional spending.
- Potential for CONs to be granted on the basis of political influence,

### Arguments in Favor of CON Laws

### Arguments Against CON Laws

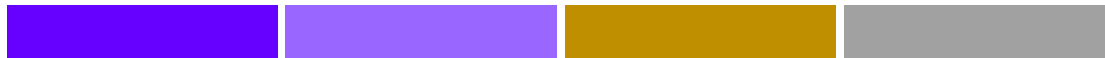
institutional prestige or other factors apart from the interests of the community.

- It is not always clear what the best interests of the community entail.

## Interactive Map of State CON Laws

Scroll over the map below and click on the states to retrieve a list of the facilities covered under the CON laws of each state.

## CERTIFICATE OF NEED STATE LAWS



CON program in place

Variation on CON program\* (click on map for details)

No CON program

No data

AK AZ

ARCACOCTDEFLHIIDLAMSNVNJNMNYORPARISCUTVTGUMPVIOKTXNEKSGAWV  
OHMIWILINVANCDALTNKYMOIAMNSDNDWYMTWAMENHMAMDPRAS

Source: NCSL, August 2016

## Certificate of Need (CON) Moratoria

State	Moratoria?	Facilities Covered Under Moratoria
Alabama	Yes	Skilled nursing beds (Ala. Admin. Code r. 410-2-4-.03);
Alaska	No	
Arizona	No	
Arkansas	Yes	ICF/MR (Ark. Admin. Code 049.00.1-005), psychiatric residential facilities, residential care facilities, hospice services (Ark. Admin. Code 049.00.1-003)
California	No	
Colorado	No	
Connecticut	Yes	Nursing homes (C.G.S.A. § 17b-354), <a href="#">hospital mergers and acquisitions</a> until 2017

Delaware	Yes	<a href="#">No additional</a> hospitals offering medical/surgical or obstetrical beds shall be established for five years (2014).
Florida	No	
Georgia	No	
Hawaii	No	
Idaho	No	
Illinois	No	
Indiana	Yes	<a href="#">Comprehensive care beds</a> —effective for three years (2015)
Iowa	No	
Kansas	No	
Kentucky	No	
Louisiana	Yes	Adult residential care providers (ARCP), intermediate care facilities for the developmentally disabled (ICF/DD), nursing homes; long-term care hospital facilities and beds (LSA-R.S. 40:2103)
Maine	No	
Maryland	No*	“The Commission may not issue a certificate of need or a determination with respect to an acquisition that authorizes a general hospice to provide home-based hospice services on a statewide basis.” (MD Code, Health - General, § 19-120)
Massachusetts	Yes	<a href="#">Long term care beds</a>
Michigan	No	
Minnesota	Yes	Hospitals and hospital bed expansions (M.S.A. § 144.551), nursing homes, radiation therapy facilities (certain locations)
Mississippi	Yes	“New construction of, addition to, expansion of, or conversion of vacant hospital beds to provide skilled or intermediate nursing home care,” “new construction, addition to, or expansion of an intermediate care facility for the mentally retarded (ICF/MR),” new Medicaid-certified inpatient psychiatric beds for children/adolescents, “new Medicaid-certified child/adolescent chemical dependency beds,” (Miss. Admin. Code 15-8-90) 103.02 Certificate of Need Criteria and Standards for the Establishment of a Home Health Agency and/or the Offering of Home Health Services, conversion of vacant hospital beds to provide skilled or intermediate nursing home care
Missouri	No	
Montana	No	
Nebraska	Yes	<a href="#">Long-term care beds</a> (Neb.Rev.St. § 71-5829.04), rehabilitation beds (Neb.Rev.St. § 71-5829.06)
Nevada	No	
New Hampshire	No	

New Jersey	No*	Nursing homes, comprehensive rehabilitation, and home health care agencies subject to the issuance of a call for applications. (N.J.A.C. T. 8, Ch. 33, 8:33 APP. B; N.J.A.C. 8:33H-1.1)
New Mexico	No	
New York	No	
North Carolina	No	
North Dakota	No	
Ohio	No*	Ohio has an effective, though not official, moratorium on long term-care facilities.; Addition of long-term care beds to an existing long-term care facility or for the development of a new long-term care facility (R.C. § 3702.59)
Oklahoma	Yes	Long term care
Oregon	No	
Pennsylvania	No	
Rhode Island	Yes	Nursing home beds, nursing home bed capacity expansion (Gen.Laws 1956, § 23-17-44)
South Carolina	No	
South Dakota	No	
Tennessee	No	
Texas	No	
Utah	No	
Vermont	No	
Virginia	No	
Washington	No*	Nursing home bed banking program
West Virginia	Yes	<a href="#">In-home personal care services</a> , opioid treatment programs (W. Va. Code, § 16-5Y-12), new skilled nursing facilities or ICF/DD, intermediate care or skilled nursing bed additions to existing facilities (W. Va. Code, § 16-2D-9).
Wisconsin	No*	Statewide nursing home bed limit (W.S.A. 150.21; W.S.A. 150.31).
Wyoming	No	
District of Columbia	No	
Puerto Rico	No data	
US Virgin Islands	No data	

## Resources

### NCSL Resources

[State Legislation Relating to Transparency and Disclosure of Health and Hospital Charges](#) - updated 2014.

## Federal Resources

- [Ambulatory Surgery Center Payment Information Now Available](#) – Centers for Medicare and Medicaid (November 2006).
- [Hospital Inpatient Payment Information Now Available](#) - Centers for Medicare and Medicaid (August 2006).
- The Federal Trade Commission [website](#)
- [Improving Health Care: A Dose of Competition](#), Federal Trade Commission and Department of Justice, (2004).

## 3<sup>rd</sup> Party Resources

1. [American Health Planning Association](#):
  1. [Articles and essays](#)
  2. [List of state CON web sites](#)
2. [Leading through Health System Change: Planning Tool](#) – Georgia Health Policy Center and the National Network of Public Health Institutes.
3. [Federal Appeals Court Upholds Virginia’s Certificate of Need Law](#). Modern Healthcare (January 2016).
4. [N.C. Lawmakers Consider Deregulation Of Health Care Facilities Construction](#). WFAE Radio, Charlotte, NC (April 19, 2015).
5. Certificate of Need (CON) Law Series - by Health Capital Consultants, Missouri
  1. [Part I: CON Law: A Controversial History](#)
  2. Part II: [The Current State of CON Programs Across the Country](#) (October 2012)
  3. [Part III: CON and the Changing Landscape of Healthcare](#) (November 2012)
  4. [Part IV: The Impact of the Affordable Care Act on CON](#) (December 2012)
6. [Ambulatory Surgery Center Association \(ASC\)](#) - trade association representing interests of ambulatory surgical centers nationwide.

Contact the Authors: [Richard Cauchi](#), Health Program Director and [Ashley Noble](#), Health Program Policy Specialist.

# ***Medical cost trend:*** Behind the numbers 2018

June 2017



---

# ***Table of contents***

---

<b><i>The heart of the matter</i></b>	<b>2</b>
---------------------------------------	----------

---

<b><i>Medical cost trend in 2018</i></b>	<b>4</b>
--	----------

---

<b><i>Putting trend in perspective</i></b>	<b>6</b>
Growth in employer medical costs settles into a “new normal”	6
Future reductions in cost trend will require more focus on price	7
Not all components of healthcare spending have the same impact on employer benefit costs	8

---

<b><i>Factors affecting 2018 medical cost trend</i></b>	<b>9</b>
Medical cost trend’s usual suspects	9
Inflator #1: Rising general inflation impacts healthcare	10
Inflator #2: Movement to high-deductible health plans loses steam	12
Inflator #3: Fewer branded drugs come off patent	13
Deflator #1: Political and public scrutiny puts pressure on drug prices	15
Deflator #2: Employers target right people with right treatments to minimize waste	17
How could Trump administration policy impact employers and their healthcare spending?	19

---

<b><i>What this means for your business</i></b>	<b>21</b>
---	-----------

---

<b><i>Acknowledgments</i></b>	<b>29</b>
-------------------------------	-----------

---

<b><i>About this research and HRI</i></b>	<b>30</b>
---	-----------

---

## The heart of the matter

The era of volatile swings and double-digit growth in employer medical costs appears to be ending. With medical cost trend hovering in the single digits for several years, the industry has been waiting for the inflection point when spending will take off. But that spike appears unlikely to happen. The New Health Economy is settling into a “new normal,” typically characterized by more attenuated fluctuations and a single-digit trend.

For four years, medical cost trend has hung between 6 and 7 percent, seeming to settle into a “new normal.” PwC’s Health Research Institute (HRI) anticipates a 6.5 percent growth rate for calendar year 2018, half a percentage point higher than in 2017. After likely changes in benefit plan design, such as changes to co-pays and network size, the net growth rate is expected to be 1 percentage point lower, at 5.5 percent.

HRI’s analysis measures anticipated spending growth in the employer-based market, which covers about half of all Americans.<sup>1</sup> Changes to government health insurance, including Medicare, Medicaid and plans sold on the public exchanges created by the Affordable Care Act (ACA), are not within this analysis’ purview.

HRI’s research found that three factors will put upward pressure on medical cost trend in 2018.

- **Rising general inflation impacts healthcare.** An upswing in the US economy, now in its third-longest expansion in American history, is gaining strength, and higher general inflation rates will affect the labor-intensive health sector, driving up wages and medical prices.<sup>2</sup>
- **Movement to high-deductible health plans loses steam.** After shifting healthcare costs to employees for years, employers are starting to ease off. Growth in high-deductible employer-based health plans is slowing, leaving less opportunity to stem increases in the use of healthcare services.<sup>3</sup>
- **Fewer branded drugs come off patent.** With fewer branded, small molecule drugs coming off patent, employers will have fewer opportunities to encourage employees to buy cost-saving generics, another strategy they’ve employed historically to keep costs down.<sup>4</sup>

Two forces may partially offset these health spending increases.

- **Political and public scrutiny puts pressure on drug prices.** Heightened political and public attention could pressure drug companies to hold price hikes in check.
- **Employers target right people with right treatments to minimize waste.** In an effort to ensure employee access to care while minimizing waste, employers are learning to better manage and deploy new treatments, technologies and information.

In addition to these new and emerging issues in 2018, there also are forces that perennially influence healthcare costs. These include economywide drivers, such as demographics and American lifestyle trends, as well as sector-specific influences, such as hospital consolidation and changes in payment models. In 2018, these recurring factors will place upward and downward pressure on cost trend.



Even with medical cost trend between 6 and 7 percent, health spending continues to outpace the economy. From 2011 to 2016, the average health premium for family coverage purchased through an employer rose 20 percent.<sup>5</sup> In the same period, wages increased just 11 percent.<sup>6</sup> This gap erodes consumers' ability to pay for other goods and services, including housing, food and transportation. Nationally, as medical costs are projected to continue to grow faster than gross domestic product (GDP), healthcare will continue to take up a greater share of the economy.<sup>7</sup> This could lead to larger budget deficits or less spending in areas such as education, infrastructure and defense. Even the "new normal" is not sustainable.

For several years, employers largely have stabilized trend growth by increasing cost-sharing with employees, who in turn slow their use of health goods and services. However, consumers are becoming more attuned to what they spend on their health.<sup>8</sup> They are voicing dissatisfaction with high-deductible health plans.<sup>9</sup> They also are forgoing cost-effective services such as preventive care, which can result in the need for higher-cost health services later.<sup>10</sup>

For medical cost trend to sink lower than its "new normal," health organizations and businesses will have to consider tackling the price of services as well as the rate of utilization. Heading into 2018, employers should look to new contract arrangements with providers to tackle healthcare prices without shifting more

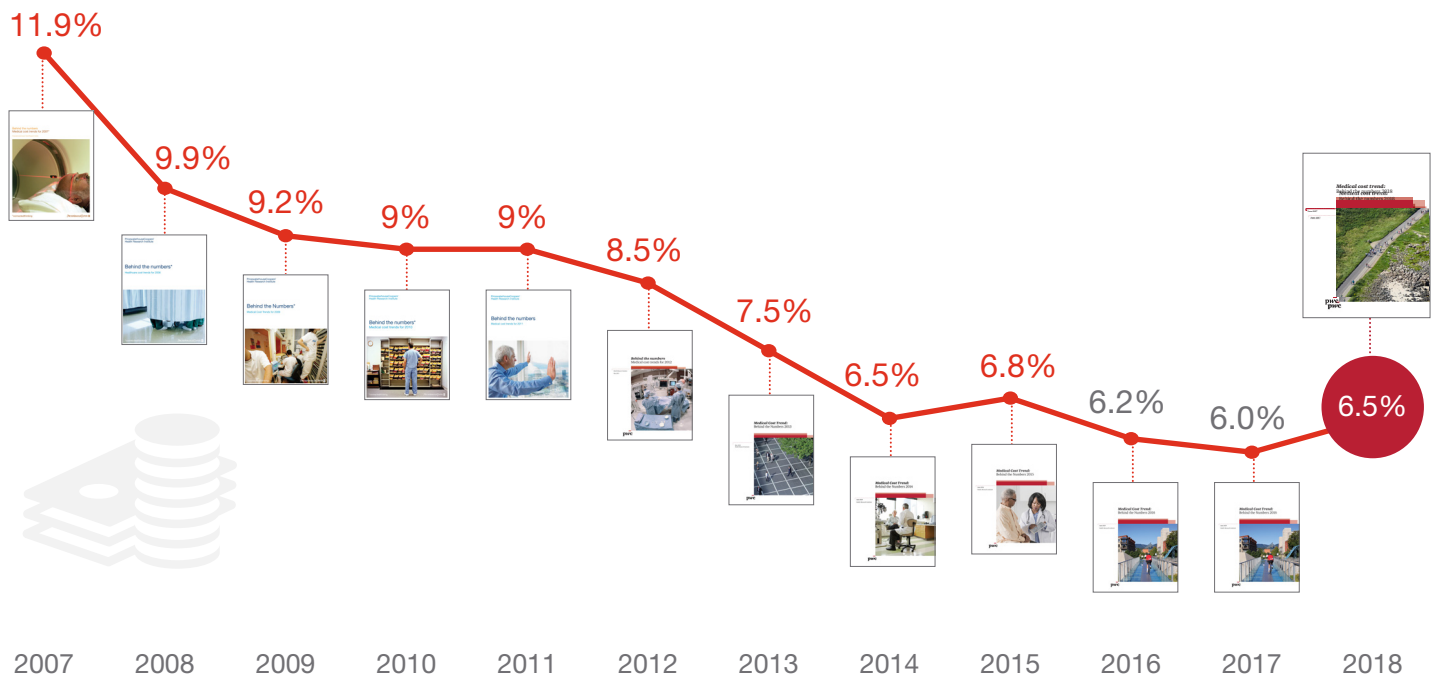
costs to employees. And healthcare providers, with opportunities to take on more risk and work with employers directly, should focus on improving care management and optimizing their use of physician extenders and nonclinical staff to keep costs down. Health insurers, in an effort to prove their value to employers, could work to steer patients to the most effective treatments and help providers accelerate pricing transparency efforts. Drug companies also should focus on increasing collaboration across the industry, giving stakeholders greater insight into their pricing and the role they play in keeping patients healthy and out of high-cost delivery settings.

# Medical cost trend in 2018

HRI projects 2018's medical cost trend to be 6.5 percent (see Figure 1). Insurance companies use medical cost trend to help set premiums by estimating what the same health plan this year will cost the following year. Benefit design changes typically hold

down spending growth by reducing utilization of services through cost sharing. The net growth rate in 2018, after accounting for benefit design changes such as higher co-pays and narrow provider networks, is expected to be 5.5 percent.

Figure 1: HRI's projected medical cost trend 2007-2018



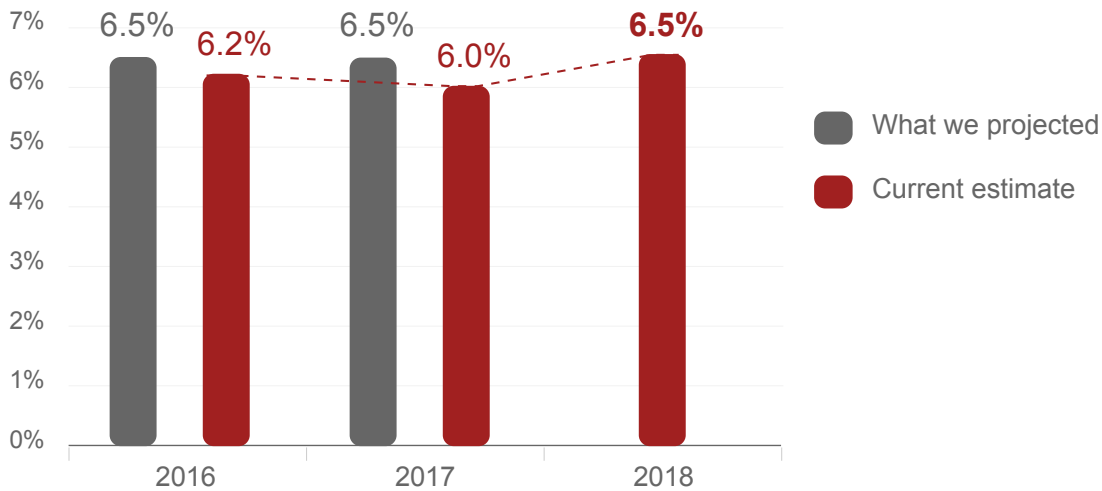
Source: PwC Health Research Institute medical cost trends 2007-2018. HRI recalibrated its trend estimates down for 2016 and 2017. See Figure 2 for more information.

## What is medical cost trend?

Medical cost trend is the projected percentage increase in the cost to treat patients from one year to the next, assuming that benefits remain the same. While it can be defined in several ways, this report estimates the projected increase in per capita costs of medical services that affect commercial insurers and large, self-insured businesses. Insurance companies use the projection to calculate health plan premiums for the coming year. For example, a 10 percent trend means that a plan that costs \$10,000 per employee this year would cost \$11,000 next year. The cost trend, or growth rate, is influenced primarily by:

- Changes in the price of medical products and services, known as unit cost inflation
- Changes in the number or intensity of services used, or changes in per capita utilization

**Figure 2: HRI recalibrated its medical cost trend estimates down for 2016 and 2017**



Source: PwC Health Research Institute analysis

HRI also has adjusted its trend estimates down for 2016 and 2017 to recalibrate for the industry’s “new normal” trend-growth pattern (see Figure 2). The adjusted estimates are based on new data showing medical costs were lower than anticipated in 2016 and 2017. As a result, HRI’s projection of 6.5 percent for 2018 reflects a slight uptick in cost trend—the first in three years.

For this research, HRI interviewed industry executives, health policy experts and health plan actuaries whose companies cover more than 100 million employer-sponsored members. HRI also analyzed results from PwC’s 2017 Health and Well-being Touchstone Survey of more than 780 employers from 37 industries, and an

HRI national consumer survey of 1,500 US adults. This projection is based on HRI’s analysis of medical costs in the employer insurance market, which covers more than 150 million active employees.<sup>11</sup>

## Putting trends in perspective

### Growth in employer medical costs settles into a “new normal”

As healthcare continues to take up a larger part of the overall economy, structural changes—such as the push toward paying for value, greater emphasis on care management and increased cost sharing with consumers—are taking stronger hold, pulling back against rapid healthcare spending growth. The industry is settling into a “new normal” marked by trend growth in the single digits that oscillates moderately from year to year (see Figure 3).

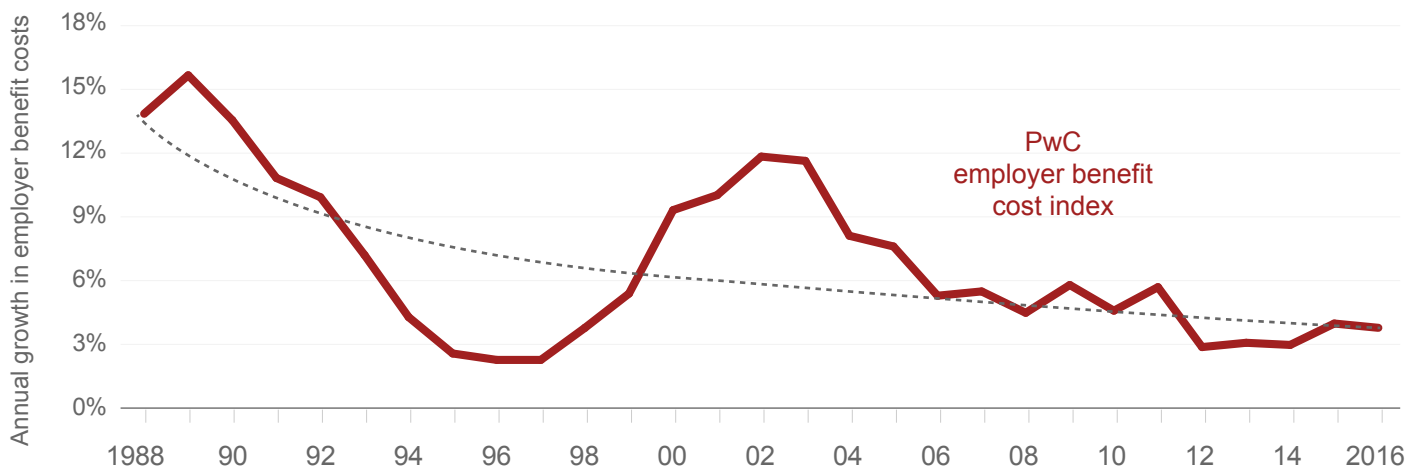
Growth in employer healthcare spending has been gradually slowing over the past 30 years. However, that deceleration has not been linear. Cost trend has risen and fallen in cycles, peaking after several years of double-digit increases, falling for several years, hitting a trough and then rebounding back to double digits. These cycles have tended to span about 10 years.<sup>12</sup>

The latest downward trend to single-digit annual growth began even before the lower economic growth surrounding the 2009 recession and subsequent recovery. With medical cost growth hanging in the single

*The industry’s “new normal” is marked by trend growth in the single digits that oscillates moderately from year to year.*

digits for over a decade now, many employers have been expecting an inflection point when costs will once again grow at double digits. However, that spike doesn’t appear to be coming. Even as the economy now picks up steam, growth in cost trend has remained at historic lows.

**Figure 3: Growth in employer medical costs—which has been gradually declining for decades—is settling into a “new normal” characterized by flatter, single-digit trend**



Source: PwC Health Research Institute analysis of CMS National Health Expenditure Accounts, Kaiser Family Foundation, and Bureau of Labor and Statistics data<sup>13</sup>

## Future reductions in cost trend will require more focus on price

Healthcare cost growth can be divided into two primary components: the unit price of services and the volume and intensity of their use, known as utilization. In recent years, growth in utilization has been low as employers and health insurers have increased cost-sharing requirements—deductibles, copayments and coinsurance—for American consumers. As consumers bear more financial responsibility for their healthcare costs, they tend to use fewer health goods

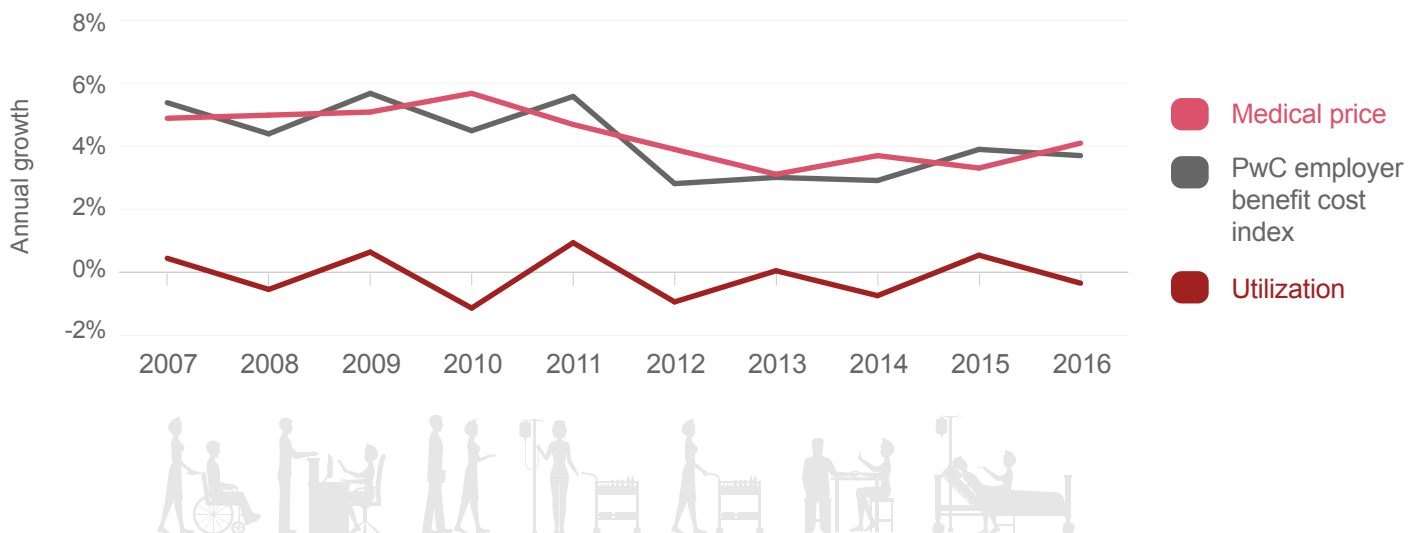
and services. Low utilization growth has helped counteract prices that have continued to rise, tempering the growth in overall healthcare cost trend (see Figure 4).

However, employers and health insurers can only shift so much cost to consumers, so annual utilization growth could start to rise. Without low utilization serving as a counterbalance, rising prices likely will put upward pressure on overall healthcare costs. For medical cost trend to start dipping below its “new normal,” health organizations and businesses should more fully concentrate on tackling the price of services.

*Without low utilization serving as a counterbalance, rising prices likely will put upward pressure on overall healthcare costs.*

**Figure 4: Price continues to be a major driver of medical cost trend**

Components of growth in employer benefit costs, 2007-2016



Source: PwC Health Research Institute analysis of Bureau of Labor and Statistics data<sup>14</sup>

## Not all components of healthcare spending have the same impact on employer benefit costs

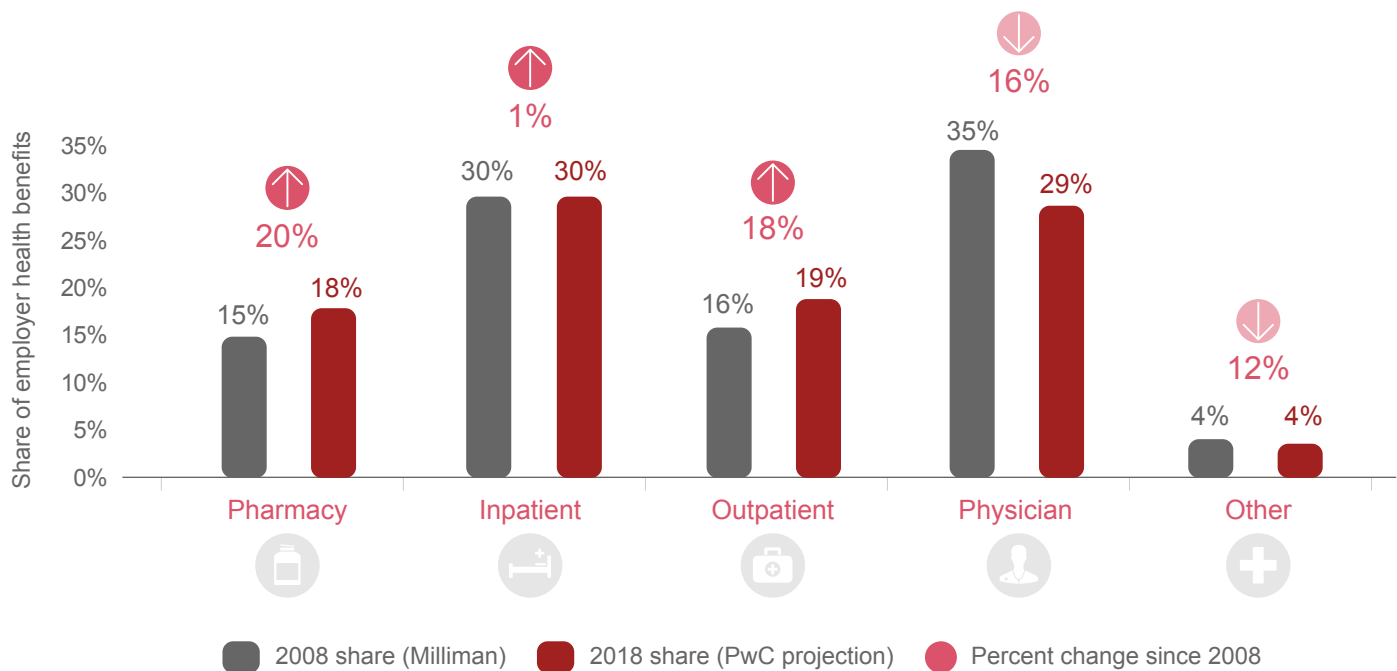
Healthcare costs also can be broken into service components such as hospital inpatient and outpatient services, physician services and prescription drug spending. Not all components contribute equally to employer costs (see Figure 5). In 2018, hospital spending will likely account for half of all medical costs. About 30 percent can be attributed to inpatient spending; 19 percent to outpatient.

Physicians will account for 29 percent; prescription drugs, 18 percent.<sup>15</sup>

Over the past 10 years, the share of prescription drug and hospital outpatient spending has been increasing relative to inpatient hospital spending, which has remained steady, and physician spending, which has been shrinking. For example, the share of spending on drugs grew to 18 percent from 15 percent between 2008 and 2018, while the physician services share shrunk to 29 percent from 35 percent in the same period. These shifts have resulted from higher trend growth in some components and lower growth in others.

However, a component's overall contribution to employers' total health spending may not be proportional to its growth rate. For instance, in 2015, new hepatitis C drugs helped drive up drug spending by 14 percent, while inpatient spending grew by only 5 percent that year.<sup>16</sup> Although the drug spending growth rate was nearly three times more than inpatient growth, prescription drugs only accounted for 20 percent more of the increase in employers' premium costs due to its smaller share of overall employer health costs.

**Figure 5: Pharmacy and outpatient costs will likely take up a larger portion of employer health spending in 2018 than they did in 2008**



Source: Milliman Medical Index for 2008 and PwC Health Research Institute projections of 2018 medical spending based on the 2017 Milliman Medical Index. <http://us.milliman.com/17>

# Factors affecting 2018 medical cost trend

## Medical cost trend's usual suspects

An analysis of historical medical cost trend reveals forces that repeatedly influence healthcare costs. These perennial factors, combined with inflators and deflators tied to a particular year, place upward and downward pressures on cost trend. They include economywide drivers such as demographics and American lifestyle trends, and healthcare-specific influences, such as technology and treatment innovations and payment model changes.

Many of these “usual suspects” have been discussed in previous *Behind the numbers* reports. The primary inflators and deflators in *Behind the numbers* highlight new and emerging issues in a particular year. But it is important to recognize that these recurring forces also affect cost trend considerably in any given year.

## Economywide drivers<sup>18</sup>

- **Income:** Higher incomes are associated with relatively higher health spending.<sup>19</sup> Although growth has been slow in the past decade, incomes are rising on average, and with them, healthcare spending.<sup>20</sup>
- **Demographics:** The workforce has been aging as Baby Boomers reach retirement.<sup>21</sup> In 2012, 15.9 percent of the civilian labor force was between the ages of 55 and 64. That percentage is expected to increase to 17.3 by 2022.<sup>22</sup> An older workforce typically has more health needs, resulting in higher healthcare expenditures. Across the full civilian labor force over the age of 16, aging will account for 0.4 percent of annual employer medical spending increases in the decade from 2012 to 2022, according to an HRI analysis.<sup>23</sup>
- **Lifestyle:** Obesity, smoking, substance abuse, poor nutrition and physical inactivity intensify utilization of health services.<sup>24</sup> Over 70 percent of Americans are considered overweight, and abuse of opioids such as heroin and prescription pain relievers is on the rise.<sup>25</sup> These growing health risks drive healthcare costs upward. However, more focus on wellness initiatives that target these risks could help to stem the tide of increasing costs.

## Healthcare-specific drivers

- **Technology and treatment innovation:** The pharmaceutical, life sciences and medical device industries are funding research and development budgets and launch new products every year, some with hefty price tags and potential to boost utilization.<sup>26</sup> For example, a more sensitive diagnostic test may detect a problem that would have otherwise gone unnoticed, resulting in treatment that could be unnecessary. Cost-saving innovation also can put downward pressure on healthcare spending. Hospital inpatient care has been falling as an increasing number of procedures can be performed at lower costs on an outpatient basis thanks to technological advances.<sup>27</sup> In addition, new technology increasingly renders virtual visits and telehealth more efficient and convenient than traditional medical care.<sup>28</sup>
- **Consolidation:** Providers, payers, and pharmaceutical and life sciences companies have engaged in a surge of merger and acquisition activity in recent years.<sup>29</sup> With organizations gaining greater market share and negotiating power, a consolidated healthcare market can drive prices up.<sup>30</sup>
- **Government regulation:** From nurse staffing levels to the use of health information technology, government regulation has long had an influence on healthcare costs. For instance, recent state regulations expanding nurse practitioners' scope of practice have been shown to reduce primary care costs.<sup>31</sup>
- **Payment models:** Historically, fee-for-service payment has helped to drive up medical cost trend, creating incentives to increase the volume of services delivered and favoring more expensive specialty care. But the shift to pay for value, instead of volume, is underway. While the scale of value-based payment models remains relatively small, early findings suggest that they could help curtail growth in healthcare spending by making transparency, quality and stronger care management higher priorities.

## Inflator #1: Rising general inflation impacts healthcare

Growth of the Consumer Price Index (CPI) has been slowing since 2011. Over the past year, it has become obvious that is changing. As the US economy heats up, general inflation will likely put more upward pressure on wages, medical prices and overall cost trend in 2018.

With employers hiring and consumers and businesses spending, all indicators point to the US economy being in an upswing and, with it, general inflation.<sup>32</sup> From 2015 to 2016, the CPI growth rate jumped 1.2 percentage points. In March 2017, the Federal Reserve raised interest rates for the second time in three months—the third time since 2009—signaling an expectation that the economy will continue to expand.<sup>33</sup> With wages

increasing, gross domestic product rising and the unemployment rate dropping to 4.4 percent in April 2017—a 10-year low that economists consider to be near “full employment”—inflation is being nudged higher.<sup>34</sup> Growth in CPI is expected to increase again in 2017 and in 2018, when it will hit 2.6 percent, the highest it has been since 2012 (see Figure 6). In 2015, it was 0.1 percent.

General inflation impacts all prices in an economy, and healthcare costs are no exception. Healthcare costs historically have tracked general inflation, if not always in perfect lockstep. For instance, if energy costs are higher, hospitals have to spend more to heat and cool their facilities. “It’s easy to forget that overall prices in

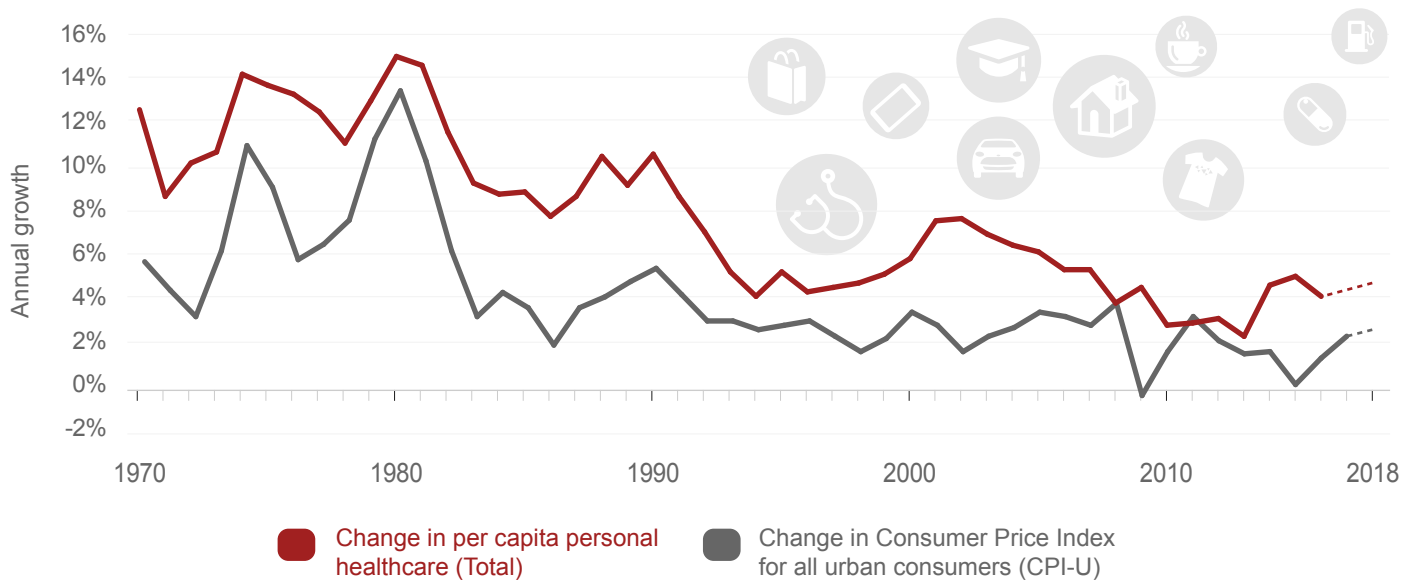
the economy were putting downward pressure on healthcare,” said Paul Hughes-Cromwick, co-director of the Ann Arbor, Mich.-based Altarum Institute’s Center for Sustainable Health Spending. “This story is over now, though.”

**“It’s easy to forget that overall prices in the economy were putting downward pressure on healthcare.”**

**Paul Hughes-Cromwick,  
co-director of the Altarum  
Institute’s Center for  
Sustainable Health Spending**

**Figure 6: US healthcare spending historically tracks the Consumer Price Index**

Growth in personal healthcare expenditures versus CPI, 1970 - 2018



Source: PwC Health Research Institute analysis of CMS National Health Expenditure Accounts and Bureau of Labor Statistics data. Dashes represent projections.<sup>35</sup>



Inflation fluctuations can be difficult to spot in real time, which can create small lags in influencing the healthcare market. So the effects of the 2016 and 2017 inflation upticks won't be felt until 2018. Medical prices in 2018 will likely be driven upward primarily by anticipated increases in economywide price inflation, according to the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary.<sup>36</sup>

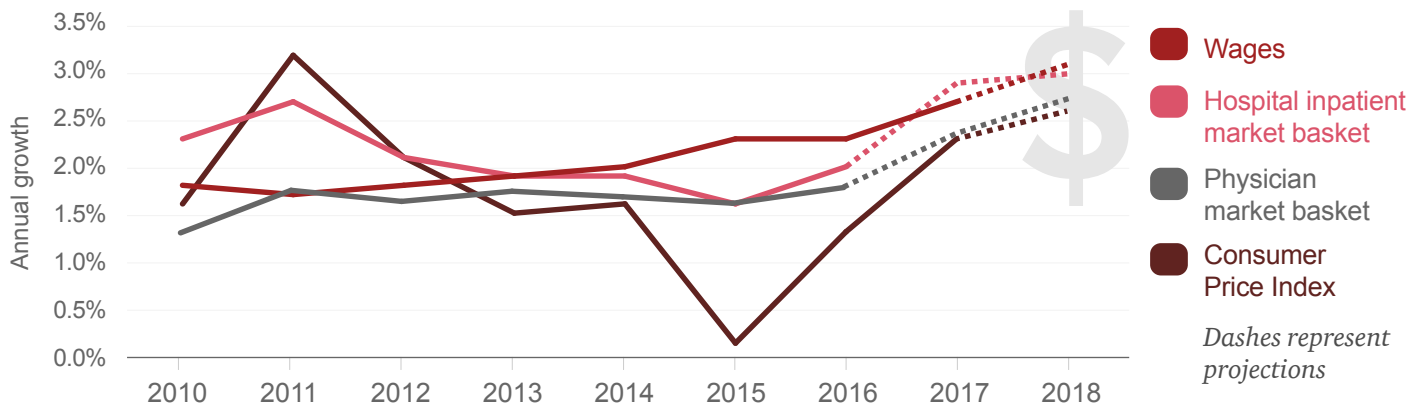
The greatest impact that higher inflation wields in the labor-intensive

healthcare industry is on salaries and benefits. “We could see wages start to grow, and that’s not a good story for keeping healthcare spending down,” Hughes-Cromwick said. However, inflation also affects the cost of inputs such as medical devices and pharmaceuticals, which tend to escalate as vendors pass on rising costs through price increases, driving up the overall price of doing business. Since the growth in inflation picked up in 2016, healthcare has seen increases in the prices of inputs required to provide

care. The collection of these inputs are reflected in “market baskets,” which measure the changes in the input prices associated with providing hospital and physician services, including prices for labor, supplies, utilities, rent and food (see Figure 7). Industry prices, or the prices that consumers face, will rise to accommodate these increased input prices.

**Figure 7: The price of providing hospital and physician services has increased as the rate of general inflation growth has increased**

Growth in wages and healthcare “market baskets”



Source: PwC Health Research Institute analysis of CMS Market Basket, CMS National Health Expenditure Accounts, CBO Economic and Budget Outlook, and Bureau of Labor and Statistics data.<sup>37</sup>

## Inflator #2: Movement to high-deductible health plans loses steam

The wave of growth in high-deductible health plans, employers' go-to strategy in recent years to curb health spending, may be plateauing. According to the 2017 PwC Health and Well-being Touchstone Survey of major US companies, only 28 percent of employers are considering offering high-deductible health plans as the only benefit option to their employees in the next three years, down from a peak of 44 percent in 2014. And the share of employers already offering high-deductible plans as their only option has been flat for the last three years (see Figure 8).

Employers are beginning to recognize that cost sharing has its limits. They “are realizing there is only so much that shopping does and that there is only so much of the healthcare dollar that is shop-able,” said Micah Weinberg, president of the Bay Area Council Economic Institute, a San Francisco-based center for economic and policy research.

High-deductible plans also can have unintended consequences. While

they can curb unnecessary care, they also can lead to consumers forgoing cost-effective, beneficial services such as preventive care and prescription drugs.<sup>38</sup> Deferring such treatment can lead to decreased productivity and increased cost of chronic care management in the long term.<sup>39</sup>

High-deductible health plans were designed to encourage consumers to be more prudent healthcare shoppers by giving them greater responsibility for their expenses. A 2017 HRI consumer survey revealed that individuals enrolled in high-deductible plans were almost 60 percent more likely to have skipped or delayed receiving medical care or getting medication in the prior year than those with lower deductibles. Some employers have experienced a more than 11 percent reduction in health spending as employees use less care.<sup>40</sup> These plans' proliferation have helped keep medical cost trend down in recent years.<sup>41</sup>

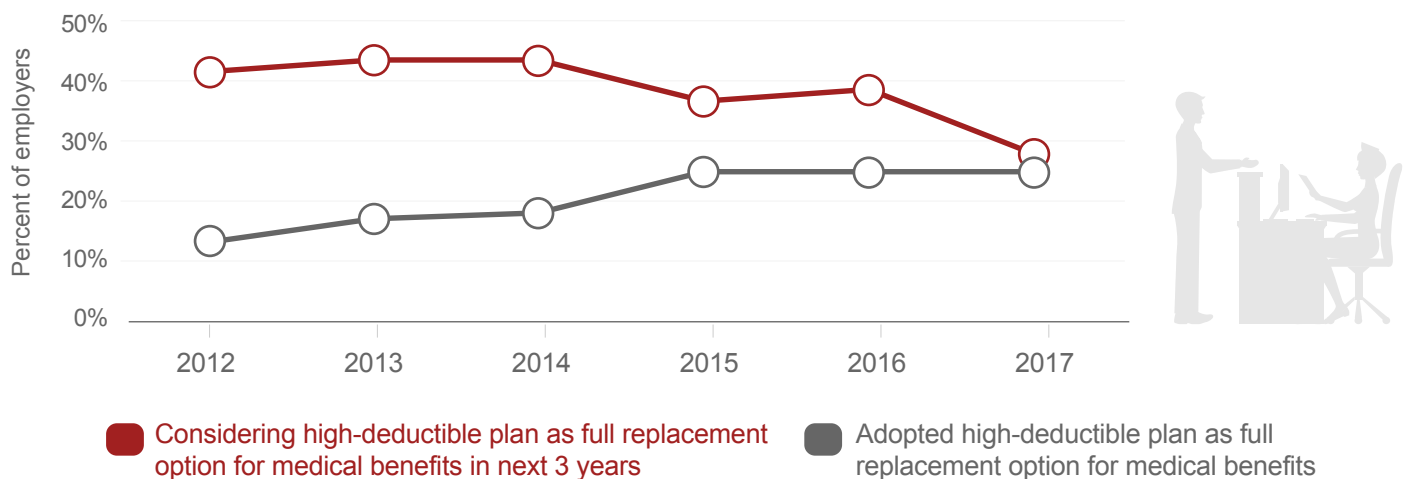
With increased competition for labor in the US economy reaching “full employment,” employers have less appetite for scaling back benefits and

continuing with a plan design that has proven largely unpopular with consumers. According to HRI's consumer survey, 69 percent of high-deductible enrollees likely would choose a different plan type next year if it's available, even if it means making a higher monthly premium contribution. At the same time, 72 percent of consumers not enrolled in a high-deductible health plan said they were not likely to choose a high-deductible plan in the future.

Ongoing health reform efforts could reinvigorate interest in high deductibles in future years by expanding the use of health savings accounts, or tax-advantaged medical savings accounts that are paired with high-deductible plans.<sup>42</sup> However the current slowdown in the shift to high-deductible plans will ease some of the downward pressure on utilization and, therefore, nudge medical cost trend up in 2018. Without the lever of high deductibles to reduce costs, employers may consider supply-side management strategies—such as narrower provider networks and centers of excellence—that focus on bringing price, rather than utilization, down.

**Figure 8: The share of employers considering a high-deductible health plan as a full replacement option is falling**

Percentage of employers who say they have adopted or are considering adopting a high-deductible plan as a full replacement option for medical benefits, 2012-2017



Source: PwC Health Research Institute analysis of PwC Health and Well-being Touchstone Surveys, 2012-2017

### **Inflator #3: Fewer branded drugs come off patent**

Beginning in 2016, the dollar sales of branded, small molecule drugs going off patent protection have been declining. As a result, fewer cost-saving generics likely will come to market in 2018, leading to a faster drug price growth rate and upward pressure on overall healthcare spending.

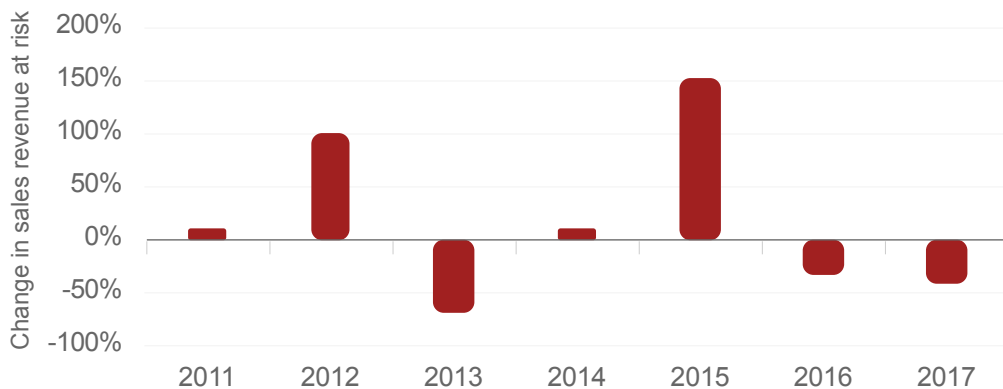
For two consecutive years, the US pharmaceutical sales revenue associated with patent expirations for branded, small molecule drugs—which are simpler, chemically manufactured

compounds—has declined. In 2016, branded, small molecule drugs losing patent protection represented \$18.9 billion in US pharmaceutical sales revenue, nearly 32 percent less than the pharmaceuticals that went off patent in 2015 (see Figure 9). In 2017, \$11.1 billion worth of pharmaceuticals will go off patent—a sharp 41.3 percent drop from 2016.

When branded, small molecule drugs lose patent protection, generic equivalents can enter the market.

Generics—with prices that frequently average 80 to 85 percent less than the branded originals within a few years after patent expiration—can create significant cost savings.<sup>43</sup> Replacing branded drug purchases with generics has become a key strategy for employers and health plans looking to combat increasing medical costs. Companies replace branded drugs on formularies with generics and encourage their use by lowering—or even eliminating—copayments or out-of-pocket costs.<sup>44</sup>

**Figure 9: US pharmaceutical sales revenue associated with branded, small molecule drugs going off patent protection declined in 2016 and 2017**



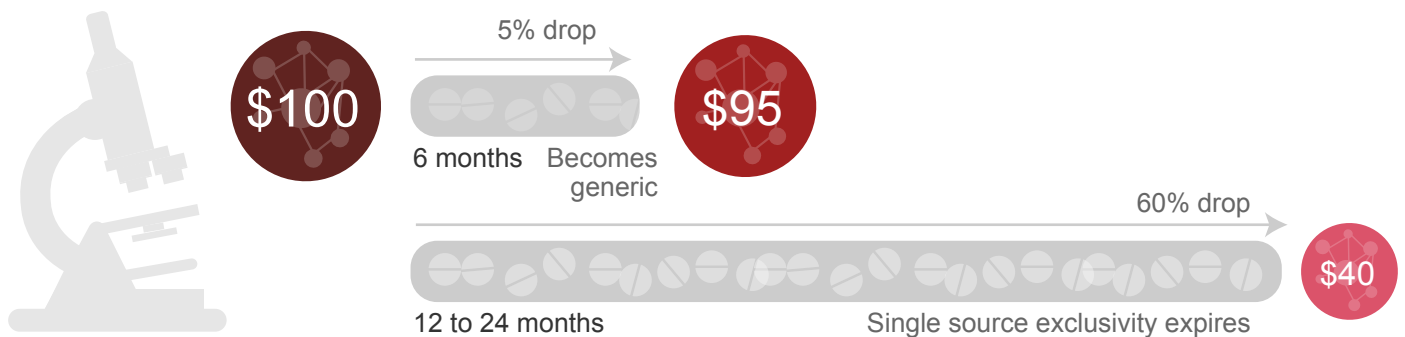
Source: PwC Health Research Institute analysis of Optum data<sup>45</sup>

The biggest cost savings impact of a small molecule drug going off patent is usually seen in the year or two after the patent's expiration (see Figure 10). This is because generic drug manufacturers sometimes are able to keep prices higher for a short time by securing six months of exclusivity, which limits competition, and because patents sometimes expire late in the year, pushing savings into the next year.<sup>46</sup> Consequently, the dip in patent expirations in 2016 and 2017 will result in fewer new generics entering the market in 2018.

While branded, small molecule drug patent expirations have dropped off in recent years, patent loss for biologics—which have contributed significantly to rising drug costs—is starting to heat up.<sup>47</sup> When an original, branded biologic loses patent protection, biosimilars can enter the market. Like a generic drug, a biosimilar is a near substitute for the biologic, sold at a discount once the original loses patent protection. But with only five biosimilars approved as of May 2017, the US biosimilars market is still developing, and prices for biosimilars are expected to generate savings of only 25 percent.<sup>48</sup>

**Figure 10: Most of the cost-savings impact of a branded drug going off patent is usually seen 12 to 24 months following the patent's expiration**

*Example:* A branded medication that sells for \$100 before patent expiration is sold for \$95 by a single generic manufacturer during the first six months, when that generic manufacturer is granted exclusivity for 180 days. However, over the next six to 18 months, as more companies are approved to produce the generic, the price drops to \$40.



Source: PwC Health Research Institute analysis of FDA data<sup>49</sup>

---

## **Deflator #1: Political and public scrutiny puts pressure on drug prices**

Triple- and quadruple-digit percentage hikes in certain drug prices over the previous three years have made front-page news.<sup>50</sup> As political and public scrutiny grows—amplified by negative opinions on social media—drug companies are becoming more price cautious, feeling pressure to hold price hikes in check to avoid negative media attention and legislative action.

Since his campaign, President Donald Trump—who has a penchant for calling out individual companies and industries on social media—has used his bully pulpit to take aim at the pharmaceutical industry. In his first 2017 press conference, he said drug companies are “getting away with murder” and that the US is “the largest buyer of drugs in the world and yet we don’t bid properly ... we’re going to start bidding and we’re going to save billions of dollars.”<sup>51</sup> After that, pharmaceutical and biotech stocks slumped—the Nasdaq Biotechnology Index by 3 percent and the Standard & Poor’s 500 Pharmaceuticals, Biotechnology & Life Sciences Index by about 2 percent. Those were the biggest one-day drops for the indexes since October 2016.<sup>52</sup>

Some federal and state lawmakers—including Rep. Elijah Cummings, D-Md., and Sen. Bernie Sanders, I-Vt.—also have been critical, launching hearings to investigate dramatic rate

hikes and introducing legislation to allow drugs to be imported from countries where prices are held in check.<sup>53</sup> This scrutiny from lawmakers is indicative of growing unrest among their constituents. In 2017, 69 percent of consumers felt that a pharmaceutical company—even if it could justify the price—should not be allowed to charge indiscriminately for a medication, according to an HRI survey. Two years earlier only 52 percent of consumers felt the same way. Consumers also told HRI that establishing government controls on drug prices should be President Trump’s top priority when considering ways to lower healthcare costs.

Drug companies are responding to this heightened scrutiny. After the uproar over EpiPen’s price surpassing \$600, Mylan took the unusual step of launching a generic version of its own product at a 50 percent discount.<sup>54</sup> Other companies have delayed the launch of drugs or shed products.<sup>55</sup>

Sector trade group, the Pharmaceutical Research and Manufacturers of America (PhRMA), also has re-evaluated its membership criteria. The group has changed its bylaws to require members to spend a certain amount of money on research and development efforts.<sup>56</sup> The new rules distance the group, which ousted 22 members with the rule change, from companies

---

***69 percent of consumers feel that a pharmaceutical company—even if it could justify the price—should not be allowed to charge indiscriminately for a medication, according to a 2017 HRI survey.***

---

whose strategy has been acquiring drugs from other companies and hiking their prices, rather than developing new products.

Some pharmaceutical companies are addressing pricing and value on their own. Last fall Allergan CEO Brent Saunders published a “social contract” with patients committing itself to greater transparency and to limiting percent price increases within the year to the single digits.<sup>57</sup> Since then, other manufacturers, including Novo Nordisk and AbbVie, have made similar pledges.<sup>58</sup>

Heightened political and public attention—and the self-regulation from drugmakers that ensues—has shown before that it can seriously affect drug price growth. In the early 1990s, drug price growth started to slow after a special election for a Pennsylvania US

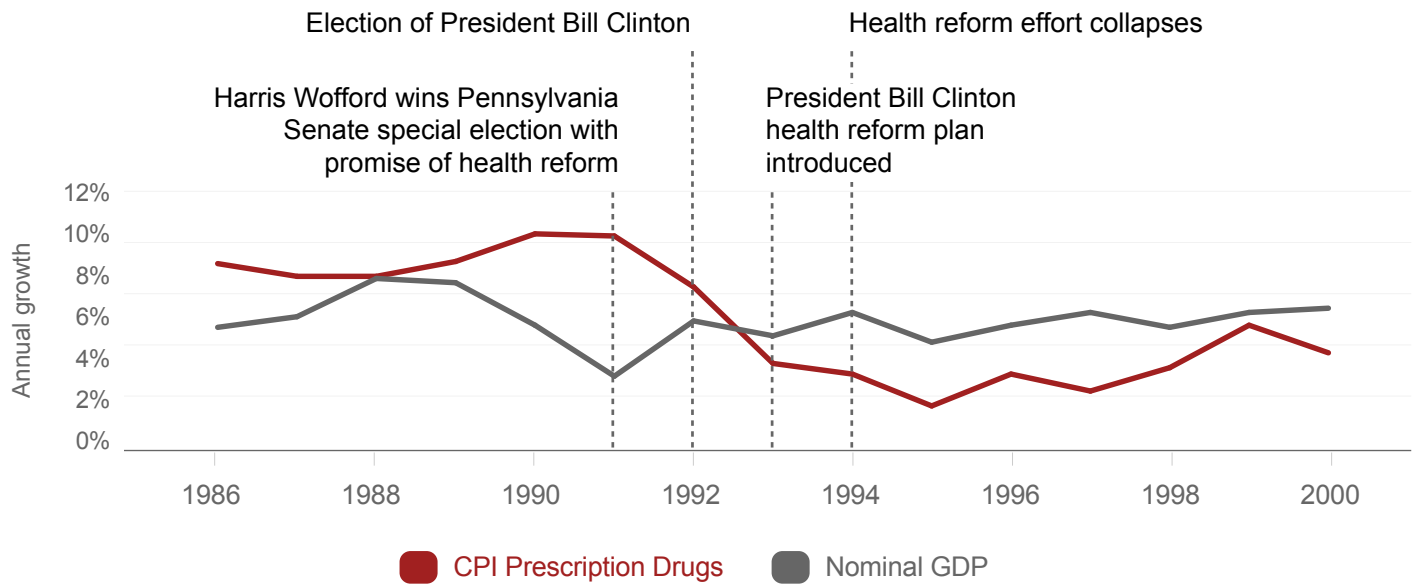
Senate seat in November 1991. The election of underdog candidate Harris Wofford—who ran on a single-issue platform to introduce national health insurance—positioned healthcare reform as a major issue in the 1992 presidential campaign.<sup>59</sup> After winning the election, President Bill Clinton continued to attack the high prices of vaccines and other pharmaceuticals.<sup>60</sup> The scrutiny resulted in a precipitous, fivefold decrease in the drug price growth rate (see Figure 11).<sup>61</sup> Before the 1991 special election, CPI for prescription drugs was growing at

nearly 10 percent; by 1995, the year after the Clinton administration’s health reform effort collapsed, the CPI for prescription drugs was growing at 2 percent.<sup>62</sup>

In a highly concentrated market—the top 10 pharmaceutical companies based on US sales made up 53 percent of the US market in 2016—a few mentions on social media could have a devastating effect.<sup>63</sup> Pharmaceutical executives would rather take matters into their own hands than run the risk of more heavy-handed caps. “It’s a fear

of every single company, industry, you name it,” said Mary Grealy, president of the Healthcare Leadership Council. “No one wants to be the subject of a tweet. Everyone wants to stay off the radar.”

**Figure 11: Public scrutiny and political pressure on pharmaceutical companies put downward pressure on the growth in drug costs in the 1990s**



Source: PwC Health Research Institute analysis

## Deflator #2: Employers target right people with right treatments to minimize waste

Heading into 2018, employers are looking to maintain access to care for their employees, but in more efficient ways, lowering costs by minimizing waste and targeting spending where it's most effective. New treatment technologies, medical devices and pharmaceuticals are increasingly expensive.<sup>64</sup> "If you're in the kitchen and one of these new specialty drugs rolls under the refrigerator, you'll throw out your fridge, because the pill costs more," said employer benefit expert Mike Thompson, president and CEO of the National Alliance of Healthcare Purchaser Coalitions. Employers don't want to deny their employees access to expensive new treatments and technologies, because they recognize their potential to improve or save lives.<sup>65</sup> Employers are

doubling down on tools and tactics such as prescription quantity limits and stronger care management that ensure the right people get the most appropriate treatment, in the most appropriate setting, and that they adhere to it.

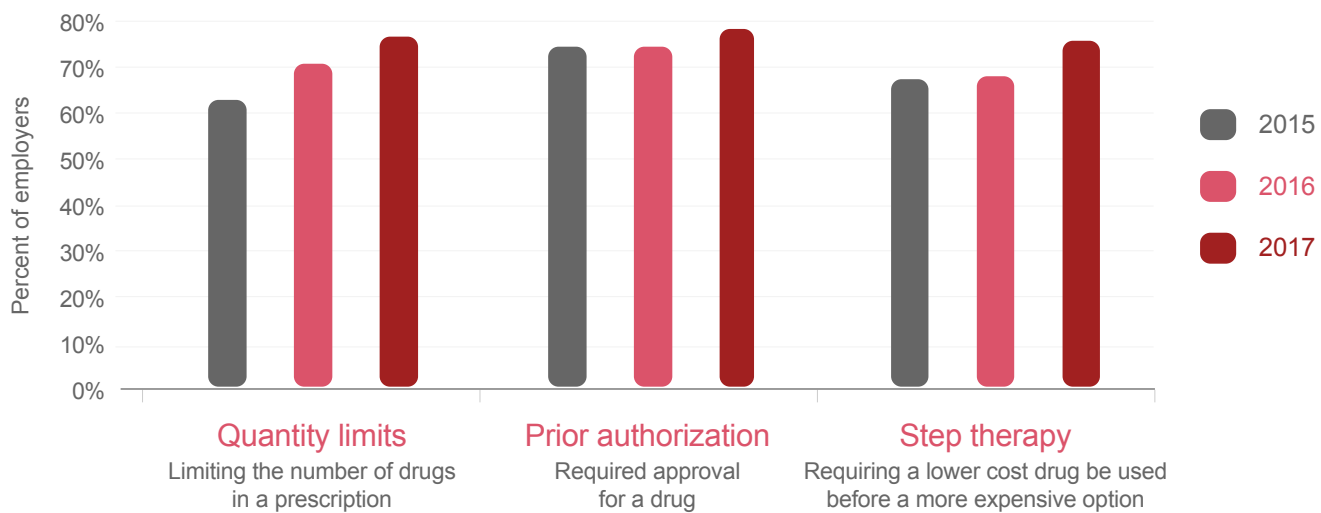
Most prescription drugs work for less than 60 percent of patients who take them.<sup>66</sup> As costly products come to market, employers are exploring new technology, such as artificial intelligence, to match people with the best treatments. In its agenda for 2017 and beyond, the Health Transformation Alliance—a newly formed employer consortium focused on lowering healthcare spending for its 38 member companies—highlighted plans to use IBM's Watson software to help

employers pinpoint treatment that will result in the best patient outcomes.<sup>67</sup> As the price of genetic testing has come down, there is also growing interest in the power of personalized medicine—once thought to be at the bleeding edge of the industry—to identify the most appropriate treatment for an individual.<sup>68</sup>

Employers also are ramping up traditional strategies, such as requiring prior authorizations for costly, new specialty drugs; instituting step therapies, which require that people first try a less expensive drug before "stepping up" to a more expensive option; and limiting the number of drugs in an initial prescription (see Figure 12). Quantity limits ensure that a product, such as an antidepressant, is

Figure 12: More employers say they are using strategies to minimize waste

Percentage of employers who say they are using controls to manage specialty drug costs, 2015-2017



Source: PwC Health Research Institute analysis of PwC Health and Well-being Touchstone Surveys, 2015-2017

*“If you’re in the kitchen and one of these new specialty drugs rolls under the refrigerator, you’ll throw out your fridge, because the pill costs more.”*

*Mike Thompson, president and CEO  
of the National Alliance of Healthcare Purchaser Coalitions*

---

going to be effective for a person before a full supply is authorized, which helps employers avoid wasting healthcare dollars on ineffective medications.

In addition, employers are paying closer attention to where treatments are delivered, looking for opportunities to shift care to lower cost settings.<sup>69</sup> Treatments that require the help of medical personnel can be far cheaper outside of the hospital. For instance, the cost of an infusion of intravenous immune globulin, a treatment administered to people with autoimmune disorders, in the home can be 62 percent lower than in a medical office and 87 percent lower than in the hospital outpatient setting.<sup>70</sup> Home infusion delivery also is associated with improved outcomes, reducing the risk of infection or other adverse events thanks to greater clinical oversight by specially trained clinicians.<sup>71</sup>

Encouraging patients to adhere to their regimens represents another hurdle employers are addressing.<sup>72</sup> Employers are increasingly turning to healthcare providers to help them manage care well so money spent treating their employees isn’t wasted. The Health Transformation Alliance plans to begin

negotiating value-based contracts with providers to care for employees with conditions such as diabetes and lower back pain in 2018. These arrangements will reimburse providers based on outcomes, which will likely incentivize better care coordination.

Employers also are seeking solutions to improve care management and increase adherence in the medical device sector. Catalia Health, a San Francisco-based patient care management company, has combined artificial intelligence technology with robotics to help patients manage chronic conditions such as diabetes and heart disease, keep their healthcare teams up to date on their symptoms and adhere to drug regimens. Pharmaceutical companies, health systems and home health organizations are using Catalia’s Mabu, a personal healthcare companion robot that interacts with patients in their homes. The robot works to understand the challenges a person faces with their particular conditions and can root out why patients may not be adhering to their regimens through conversation and observation.<sup>73</sup>



## **How could Trump administration policy impact employers and their healthcare spending?**

Lawmakers in Washington are continuing with plans to at least partially repeal and replace the Affordable Care Act (ACA), moves that could affect employers directly and indirectly. While the House has passed its version of an ACA repeal and replace bill, Senate Republicans are discussing an alternative bill that can pass the Senate. The ultimate fate of this effort remains in question since both the House and Senate must agree on a final bill. In its current state, the House's repeal and replace bill—the American Health Care Act (AHCA)—contains several provisions that employers should watch:

- **Reduces the employer mandate penalty:** Under the ACA's employer mandate, companies with more than 50 employees are required to offer insurance to those working more than 30 hours per week. The House-passed AHCA would reduce employer mandate penalties to \$0, effectively repealing the mandate. That would reduce reporting requirements and financial penalties associated with noncompliance for employers.

Some companies, particularly small employers with slightly more than 50 employees and companies with many lower-wage employees, may find it more advantageous to drop coverage. Most large employers likely would retain coverage, however. More than 90 percent of all employers surveyed in PwC's 2017 Health and Well-being Touchstone Survey said they would not change employee eligibility if they were no longer required to offer coverage.<sup>74</sup>

- **Reduces the individual mandate penalty to \$0:** The ACA requires that most individuals carry a minimum level of health insurance coverage or pay a penalty. The House-passed AHCA would reduce the penalty to \$0. Eliminating that

mandate could increase nongroup market premiums as healthier people forgo coverage because they no longer face a penalty for doing so. Higher premiums in the nongroup market would create further incentive for workers to seek out employer-sponsored insurance.<sup>75</sup>

- **Further delays the "Cadillac tax":** The House-passed AHCA delays the 40 percent excise tax on high-cost employer-sponsored health plans until 2026. While employers would welcome the delay, some of them would opt to reduce employee health benefits to avoid the tax if and when it takes effect, which could create ill will among workers.
- **Allows states to waive some ACA consumer protections:** Under the House-passed AHCA, states could opt to waive three key ACA consumer protections, which would allow states to redefine essential health benefits, allow insurers to charge some consumers nongroup premiums based on their health status, and offer insurers the option of charging older consumers in the nongroup and small group markets more than five times the premiums they charge younger ones.<sup>76</sup>

With the state waivers, self-insured employers and large group health plans would be able to choose which state's definition of essential health benefits they would abide by—a choice they were granted under the ACA—giving them more flexibility in plan design. Some employers could choose to offer employees lower-cost, “slimmed down” plans.

It remains to be seen if employers would take this option, particularly as competition increases in the labor market.<sup>77</sup> When asked what features they would continue if ACA plan design mandates were repealed, 72 percent of employers said they'd continue to fully pay for required preventive services, 63 percent would continue without pre-existing condition limitations and 53 percent would continue no annual dollar limits, according to PwC's 2017 Health and Well-being Touchstone Survey.<sup>78</sup>

If states win waivers to widen the age-band ratings and charge premiums based on health status, employers could see younger employees drop employer-sponsored coverage for less expensive nongroup health plans, making employers' risk pools more adverse and premium costs higher.

- ***Creates age-based tax credits to help pay for premiums; eliminates cost-sharing subsidies:*** Consumers would no longer receive help buying coverage based on their ability to pay. Instead, they would receive age-based tax credits, which the Congressional Budget Office has determined would leave millions of consumers unable to afford coverage. This could lead to increases in uncompensated

care, which could be passed on to employers in the form of higher premiums or higher provider charges.

Under the House-passed AHCA, states would receive federal money to help offset some of these issues. Moving to age-based tax credits also could incentivize young and healthy employees to drop their employer-sponsored coverage in favor of less expensive nongroup health plans. The loss of young and healthy employees would make employers' risk pools more adverse and might raise the cost of employer coverage.

Another potential effect of efforts to repeal and replace the ACA is that it could cause hospitals—often the largest employers in a given area—to slow hiring. Many hospitals hired additional staff to handle the increased demand for services that came with the ACA's newly insured patients. But if millions lose coverage, it would be challenging to continue with the same staffing levels, particularly as the cost of doing so rises in a strong economy.<sup>79</sup> ACA repeal could result in a loss of 2.6 million jobs, 1 million of which would be in the healthcare field, according to an analysis by George Washington University's Milken Institute of Public Health.<sup>80</sup>

In addition to “repeal and replace” legislation, changes in leadership at regulatory agencies also could impact employer healthcare spending. At the Food and Drug Administration (FDA), newly appointed commissioner Dr. Scott Gottlieb has expressed a desire to modernize and speed-up the approval of novel treatments, a move which eventually could push healthcare prices up.<sup>81</sup>

Outside of healthcare, efforts by the Trump administration and Congress to overhaul the US tax code also would have implications for employers. Key business tax reform proposals include lowering the corporate tax rate and implementing a mandatory one-time tax rate on unremitted foreign earnings.<sup>82</sup> Tax reform in any shape or size would affect the way employers do business, impacting considerations around when to take deductions and whether to outsource labor.<sup>83</sup>

Overall, the impact of Trump administration policy on employers and their healthcare costs is likely to be modest in the near term. However, employers can act to better navigate this period of uncertainty.<sup>84</sup> For instance, employers can consider what changes they would make to eligibility requirements and health plan design under different scenarios.

Regardless of reform efforts' outcome, the focus on value and push to reduce healthcare costs won't abate. Employers should continue to explore potential cost-control measures such as transparency, value-based payments and delivery system options, such as accountable care organizations and direct contracting with providers. Uncertainty about the future of the nongroup and Medicaid markets may prompt health insurers to focus more on the employer market for continued growth, increasing competition. To meet employers' demands for value, health insurers will need to better engage consumers and collaborate with providers to deliver better outcomes and lower costs.

# What this means for your business

## Employers

Though health benefit costs are growing at a low rate compared with historical trends, growth in employer premiums is still outpacing wage growth, making benefit costs unsustainable in the long run.<sup>85</sup> In a competitive labor market, employers are looking for new cost containment strategies beyond shifting more costs to employees.

### Things to consider

**Target work site health promotion programs to the right people.** Work site wellness programs have become a critical tool for employers to improve their employee population's health and reduce healthcare spending. But these programs often appeal most to employees who are already healthy and will see marginal benefit from the intervention.

Employers should consider harnessing biometric data and analytics tools to target health programs to the right people, treating their populations as individuals rather than averages. Such tools can give employers insight into their employees' health status and help the employees understand how behavioral choices, environmental factors and clinical interventions can affect their well-being. With this information, employers can discover which programs will likely improve health measurably for specific populations. By pinpointing higher-risk individuals, employers can focus investments on initiatives that will yield the greatest health improvement and cost savings, building programs that have a meaningful impact on their healthcare spending.

### Evaluate the value of drug spending.

Employers should take a deep dive into their claims data to identify what conditions and drugs drive most of their spending. In doing so, they will be better able to evaluate new therapeutics' potential value and weigh added costs against potential benefits for their employees. Employers should then work with pharmacy benefit managers (PBMs) to restructure formularies accordingly, providing more incentive to use drugs that will likely deliver more value to their employees.

For example, members of the Health Transformation Alliance—a newly formed consortium of 38 large employers—have formed a first-of-its-kind arrangement with two PBMs. It allows Alliance members to have a seat at the table during deliberations on formulary placement. Companies will be able to customize their benefit plans and choose to include drugs the PBM may have excluded.<sup>86</sup> This arrangement means that employers will be able to create formularies based on evidence from their claims data and tailored to their employees' needs, ensuring greater value for every dollar spent.

### Focus more on provider arrangements to tackle price.

Facing limitations to how much they can share costs with employees, employers may want to focus on supply-side management, or how they work with providers, to keep prices down. One potential strategy is using products with more limited networks of providers to deliver high-quality care at affordable prices. According to the 2017 PwC Health and Well-being Touchstone Survey, 8 percent

of employers are already using a performance-based network, and 30 percent are considering it for the future.

Another potential strategy is to contract directly with specific providers for high-cost or high-risk procedures such as joint replacements, back surgery, transplants, bariatric surgery and cancer care. Direct contracting could be done through centers of excellence, which establish the best care sites for specific conditions, or bundled healthcare payments. Employers could partner with new entrants who are bridging the gap between employers and providers.

One example is San Francisco-based Carrum Health, which has created a comprehensive bundled payment solution that connects employers to regional healthcare providers, identifies top-performing providers, manages those providers, and engages employees to use their services. The company's customers have seen cost savings of at least 40 percent for knee and hip replacement, cervical spinal fusion, lumbar spinal fusion and coronary bypass episodes.<sup>87</sup>

Both strategies present challenges. For one thing, healthcare markets differ widely in provider concentration and competition, which affect employers' negotiating power. For another, employees may be reluctant to have their provider choice limited. If that's the case, employers could educate employees on the trade-offs between provider choice and cost, and give workers incentives to use selected providers by offering lower premiums or waiving co-payments.<sup>88</sup>

## **Healthcare providers**

As general inflation and wages rise, healthcare providers are feeling the strain of their labor-intensive cost structure. They should consider their practice models and how to best use physician extenders and nonclinical staff to keep costs down and optimize patient care. Providers also should seize opportunities to take on more risk and work with employers directly. Focusing on better engaging patients, improving care management and delivering services more cost-effectively could be winning strategies to better demonstrate their value.

### **Things to consider**

**Assess skills mix.** As labor costs continue to account for over half of providers' budgets, providers should consider how to make the most of their staff's skills and productivity.<sup>89</sup> All staff should be practicing to the top of their license. Within care teams, each member should perform duties that use the full extent of their education and training instead of doing tasks that someone with less training could do. For example, a medical assistant—rather than a nurse—can show patients to rooms and check their vitals. Such measures can yield higher patient flow and satisfaction. Providers also should consider investing in technologies that improve staff productivity.

**Look for new opportunities to manage drug costs.** Rising drug costs have been just as problematic for providers as for employers, insurers and consumers, particularly as they shift to value-based payment models and take on greater responsibility for managing the total cost of care.<sup>90</sup> Historically, however, providers have remained on the sidelines of discourse over this issue. However, as political and public scrutiny of drug pricing grows, providers should consider allying themselves with health insurers, patient advocacy organizations and the government to work with drug companies on pricing models the market can bear that would hold price hikes in check. Doing so might also help providers keep their own costs down.

In the near term, providers should determine if they are eligible for cost reductions through the Health Resources and Services Administration's 340b Drug Discount program, which supplies discounted outpatient drugs to government-funded hospitals, health systems and clinics serving low-income patients. Those already participating in the program should confirm that they meet the requirements for participation—and have the documentation to prove it—in the event of an audit. Another option some providers are taking is launching their own specialty pharmacies. That helps them curb drug costs by closely overseeing appropriate drug use through clinical protocols, formularies and inventory management.<sup>91</sup>

**Demonstrate value to employers.** Employers' interest in working directly with providers is growing, so providers should seize the opportunity to participate in pay-for-performance models. An HRI analysis found that providers may be more prepared than they realize to have their reimbursements based on quality outcomes.<sup>92</sup> Providers that can guarantee prices and outcomes early can establish relationships with employers ahead of competitors. Strong actuarial capabilities can measure costs and performance accurately, and strong leadership in setting priorities can accelerate change.

### **Invest in care management.**

Providers looking to trim costs often have taken aim at nonclinical staff such as case managers and social workers. But these employees can be critical to keeping costs down, and providers should consider doubling down on them. Employers and health insurers are demanding greater care coordination, and case managers provide that. They also can prevent costly, avoidable readmissions. Unit-based pharmacists, who work directly with clinicians to recommend therapies and dosage, can manage overall drug spending. All of these measures help providers with their bottom lines, while simultaneously becoming more patient-centric.

## **Health insurers**

Health insurers are under pressure from employers to reduce costs. In some instances, employers are opting to stop working with them altogether.<sup>93</sup> Insurers need to prove their value to employers by supporting closer management of high-risk patients, steering patients to the most effective treatments and pushing for greater pricing transparency.

### **Things to consider**

#### **Look for ways to automate processes.**

Health insurers have made some investments in technology, but their costs are still heavily driven by an increasingly expensive labor force. Automation can help. Advanced analytics and cloud-based technologies can automate call center processes, and robotics can increase the adjudication rate in claims processing.<sup>94</sup> If health insurers can reduce their costs with technology, they can pass their savings on to employers through lower premiums.

#### **Consider alternative therapies.**

Health insurers are facing less opportunity to shift branded, small-molecule drug purchases to cost-saving generics. Instead, they should consider incentives to persuade patients to engage in alternative methods—such as lifestyle management—to manage chronic conditions without costly drugs.<sup>95</sup> For instance, some plans have tied financial incentives such as gift cards and premium reductions to progress on such measures as blood pressure or body mass index.

Others are prioritizing access to counseling and other behavioral health treatment to better address comorbidities that can exasperate chronic conditions. And as more branded biologics come off patent,

insurers should explore building less costly biosimilars into their plans, even if they may not offer as much savings as traditional generics.

#### **Explore value-based purchasing with biopharmaceutical companies.**

According to a survey of health insurance executives conducted by HRI, less than 20 percent of health insurers are using risk-sharing agreements, outcomes-based payments or bundled payments with biopharmaceuticals.<sup>96</sup> Such value-based purchasing models could help employers and health insurers see a return on their investments.

As drug companies face greater scrutiny of their prices, they may be more interested in these arrangements, and health insurers may have more negotiating leverage.<sup>97</sup> However, some challenges remain with these models. Identifying measures that accurately evaluate value can be difficult for certain conditions, as can collecting the necessary data to assess performance.

#### **Take ownership of collaborating with pharmaceutical companies and providers to manage high-risk patients.**

Health insurers should work more closely with providers and pharmaceutical companies to identify high-risk patients and make sure they are adhering to their treatment. This can be accomplished by placing those patients in programs that use such methods as check-in calls from nurses, in-home social worker visits and email reminders from physicians. Since health insurers own a large volume of patient data, they are equipped to be the driving force pushing for better patient adherence.

**Be providers' partner in reducing medical costs.** Eighty-five percent of health insurers' costs—which are ultimately passed on to employers—are dependent on providers' care delivery. Insurers should see themselves as providers' partners in keeping medical costs down. One way to do this is for insurers to take ownership of consumer engagement by deploying their own care managers, social workers and community health workers to help providers manage patients better. These nonclinical professionals conduct home visits, provide education, schedule appointments, connect patients with resources in the community and monitor adherence to treatment.<sup>98</sup> They tackle the roots of health problems by focusing heavily on social determinants that affect health, such as socioeconomic status, education and physical environment. By proactively helping consumers to navigate the healthcare system, health insurers establish themselves as more attractive partners for providers and advocates for consumers, both of which help them to improve care management and ultimately reduce medical costs.

Insurers also can use data and analytics to give providers insights into patients and patient populations so the providers can better anticipate consumers' needs and engage them before more costly issues arise. Insurers' data also can accelerate cost transparency initiatives by helping providers to determine their true cost of care. Making this information available to consumers can then help them to shop for care and make more cost-conscious decisions about the services they receive.

## **Pharmaceutical and life sciences**

Facing ever-growing scrutiny, the pharmaceutical industry must focus on demonstrating its products' value. Increased collaboration with other industry stakeholders and greater transparency on pricing can help companies demonstrate their role in keeping patients healthy and out of high-cost delivery settings.

### **Things to consider**

**Re-evaluate sales and marketing needs.** As the costs of labor and other inputs increase in an expanding economy, pharmaceutical and life sciences companies should re-evaluate their budgets. In addition to clinical outsourcing, companies can consider outsourcing nonclinical operations, including sales, marketing and manufacturing. Keeping operational costs down could leave companies with savings they can reinvest in strategic initiatives to accelerate growth.

**Model drug pricing policy impacts.** Increased attention and inquiries into drug pricing strategies by the government could result in far greater transparency, with drug firms forced to make corporate documents and financial information public.<sup>99</sup> From 2015 to 2017, over 20 states introduced legislation that would require companies to make disclosures about drug pricing and costs.<sup>100</sup> Because of these developments, drug companies should proactively model various drug pricing policy impacts so they can give clear justifications for pricing decisions from the perspective of different customers.

**Collaborate on pricing decisions upfront.** The pressure to provide more transparency into pricing has led some drug companies to collaborate with PBMs and third-party drug value assessors such as the Institute for Clinical and Economic Review to set prices before launch. These efforts helped avoid public backlash.<sup>101</sup> If buyers can work behind the scenes on a particular pricing strategy, they will put up less resistance to new products that hit the market. Also, if buyers have advance knowledge about treatments coming to market, they can budget for them accordingly.

**Educate providers on personalized medicine's benefits.** As the price of genetic testing has come down and genetic information has become more useful in the last decade, opportunities are growing for personalized medicine to improve patient outcomes and save money in the long run by helping providers pinpoint the right treatment up front.<sup>102</sup> But a majority of today's front line doctors don't have a genetics background or the tools needed to take full advantage of precision medicine's power.

Pharmaceutical, life sciences and medical device companies should educate physicians on the latest genetic technology's benefits and its potential to eliminate costs from ineffective treatments. Indications exist to suggest they will likely have a receptive audience. In fall 2017, Inova Health System in Virginia will start training employees in genetics and pharmacogenomics to fill the demand for genetic experts at its new Center for Personalized Health campus.<sup>103</sup> And Stanford Medicine has teamed with Google Genomics to launch a new Clinical Genomics Service, aiming to make genetic testing a routine part of care.<sup>104</sup>

## Notes

1. Kaiser Family Foundation, "2016 Employer Health Benefits Survey," Sep. 14, 2016, <http://kff.org/report-section/ehbs-2016-summary-of-findings/>.
2. Josh Zumbrun, "This is Now the Third-Longest Economic Expansion in U.S. History," Wall Street Journal, March 1, 2017, <https://blogs.wsj.com/economics/2017/03/01/this-is-now-the-third-longest-economic-expansion-in-u-s-history/>.
3. PwC Health Research Institute analysis of PwC Health and Well-being Touchstone Survey for 2017, Spring 2017.
4. Kaiser Health News, "More companies encourage increased use of generic medications," June 11, 2009, <http://khn.org/morning-breakout/dr00040769/>.
5. Kaiser Family Foundation, "2016 Employer Health Benefits Survey," Sep. 14, 2016, <http://kff.org/report-section/ehbs-2016-summary-of-findings/>.
6. Bureau of Labor Statistics, "Average Hourly Earnings of Production and Nonsupervisory Employees," <https://data.bls.gov/timeseries/CES0500000008>.
7. Sean P. Keehan, Devin A. Stone, John A. Poisal, et al. "National Health Expenditure Projections, 2016-25: Price Increases, Aging Push Sector to 20 Percent of Economy," Health Affairs 36, No. 3, 2017.
8. Strategy&, "The birth of the healthcare consumer: Growing demands for choice, engagement and experience," Oct. 2014, <https://www.strategyand.pwc.com/media/file/The-birth-of-the-healthcare-consumer.pdf>.
9. PwC Health Research Institute Consumer Survey, Spring 2017
10. Urban Institute, "Payment methods and benefit designs: How they work and how they work together to improve health care," April 2016, [http://www.urban.org/sites/default/files/02\\_high-deductible\\_health\\_plans.pdf](http://www.urban.org/sites/default/files/02_high-deductible_health_plans.pdf).
11. Congressional Budget Office, "Federal subsidies for health insurance coverage for people under age 65: 2016 to 2026," March 24, 2016, <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51385-healthinsurancebaselineocol.pdf>.
12. PwC Health Research Institute, "Medical cost trend: Behind the Numbers 2017," June 2016, <http://pwchealth.com/cgi-local/hregister.cgi/reg/pwc-hri-medical-cost-trend-2017.pdf>.
13. PwC's Employer Benefit Cost Trend Index is the average of three of the most respected measures of employee benefit costs: 1.) Growth in Average Annual Health Insurance Premiums from the Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1988-2016. 2.) Growth in Per Enrollee Expenditures for Employer Sponsored Health Insurance from the Centers for Medicare and Medicaid Services, National Health Accounts, Historical NHE Table 21: Expenditures, Enrollment and Per Enrollee Estimates Health Insurance: United States, Calendar Years 1987-2015. (For 2016 growth, see NHE Projections 2016-2025 Table 17: Health Insurance Enrollment and Enrollment Growth Rates, Calendar Years, 2009-2025. 3.) Growth in Employee Cost for Employee Health Insurance from the Bureau of Labor Statistics, 1988-2016.
14. The utilization trend in Figure 4 is estimated as a "residual"—what is left after price is removed from growth in benefit costs. As such it includes other elements that affect spending such as measurement errors in the CPI price component, declining numbers of workers with health benefits and less comprehensive health insurance.
15. PwC Health Research Institute estimates for 2018 are based on medical cost spending data obtained from the 2017 Milliman Medical Index (MMI) and the annual rate of increase in costs by component of medical care from 2016 to 2017. <http://us.milliman.com/uploadedFiles/insight/Periodicals/mmi/2017-milliman-medical-index.pdf>.
16. PwC Health Research Institute analysis of medical cost spending data obtained from the 2015 Milliman Medical Index (MMI) and the annual rate of increase in costs by component of medical care from 2014 to 2015. <http://us.milliman.com/insight/Periodicals/mmi/2015-Milliman-Medical-Index/>
17. "Other" includes miscellaneous other items and services such as durable medical equipment, prosthetics, medical supplies, ambulance and home health. Numbers may not add due to rounding.
18. General inflation, which is highlighted as a primary inflator for 2018, is also a perennial "usual suspect" in the economywide category.
19. Alliance for Health Reform, "Cost Drivers in Health Care," [http://www.allhealth.org/wp-content/uploads/2017/03/Cost\\_Drivers\\_in\\_Health\\_Care\\_109.pdf](http://www.allhealth.org/wp-content/uploads/2017/03/Cost_Drivers_in_Health_Care_109.pdf).
20. US Census Bureau, "Income and Poverty in the United States: 2015," Sept. 2016, <https://www.census.gov/data/tables/2016/demo/income-poverty/p60-256.html>. The growth in healthcare spending tends to increase with respect to income but with an average lag of more than two years. PwC Health Research Institute, "Medical Cost Trend: Behind the Numbers 2015," June 2014, <https://www.pwc.com/us/en/health-industries/top-health-industry-issues/assets/pwc-hri-medical-cost-trend-2015.pdf>.
21. The National Institute for Occupational Safety and Health (NIOSH), "Productive aging and work," Centers for Disease Control and Prevention, <https://www.cdc.gov/niosh/topics/productiveaging/>.
22. Bureau of Labor Statistics, [https://www.bls.gov/opub/ted/2014/ted\\_20140124.htm](https://www.bls.gov/opub/ted/2014/ted_20140124.htm).
23. HRI analyzed Bureau of Labor Statistics data on the distribution of the civilian labor force by age in 2012 versus the BLS projected distribution in 2022. See: Bureau of Labor Statistics, "Share of labor force projected to rise for people age 55 and over and fall for younger age groups," Jan. 24, 2014, [https://www.bls.gov/opub/ted/2014/ted\\_20140124.htm](https://www.bls.gov/opub/ted/2014/ted_20140124.htm). HRI used the Medical Expenditure Panel Survey to determine 2012 per capita healthcare costs by age for individuals with employer sponsored health insurance for the full year. Holding per capita healthcare costs by age constant, the aging of the civilian labor force by 2022 will increase health care expenditures per capita by 0.4 percent.
24. Klea D. Bertakis and Rahman Azari, "The influence of obesity, alcohol abuse and smoking on utilization of health care services," Health Services Research, Vol. 38, No. 6, June 2006, <https://www.stfm.org/fmhub/fm2006/June/Klea427.pdf>.
25. Department of Health and Human Services, "The Opioid Epidemic: By the Numbers," June 2016, <https://www.hhs.gov/sites/default/files/Factsheet-opioids-061516.pdf>. National Center for Health Statistics, "Obesity and Overweight," Centers for Disease Control and Prevention, <https://www.cdc.gov/nchs/fastats/obesity-overweight.htm>.
26. Medical Device Technology magazine, "Report: Medical Device Company R&D Remains Stable," June 1, 2016, <https://www.mdtmag.com/news/2016/06/report-medical-device-company-r-d-remains-stable>.
27. Girod, Christopher S., Weltz, Scott A., Hart, Susan K., "2017 Milliman Medical Index", May 16, 2017, <http://us.milliman.com/uploadedFiles/insight/Periodicals/mmi/2017-milliman-medical-index.pdf>.
28. PwC Health Research Institute, "Medical Cost Trend: Behind the Numbers 2016," June 2015, <http://pwchealth.com/cgi-local/hregister.cgi/reg/pwc-hri-medical-cost-trend-2016.pdf>.
29. Alyssa Rege, "3 healthcare M&A predictions for 2017", Becker's Hospital Review, Dec. 16, 2016, <http://www.beckershospitalreview.com/hospital-transactions-and-valuation/3-healthcare-m-a-predictions-for-2017.html>
30. Paul B. Ginsberg, "Health care market consolidations: Impacts on costs, quality and access," Brookings Institute, March 16, 2016, <https://www.brookings.edu/testimonies/health-care-market-consolidations-impacts-on-costs-quality-and-access/>.
31. Pennsylvania Coalition of Nurse Practitioners, "Five New Studies: Nurse Practitioners Expand Access to Health Care, Lower Costs, Improve Outcomes," News & Press, March 1, 2016, <http://www.pacnp.org/news/277542/Five-New-Studies-Nurse-Practitioners-Expand-Access-to-Health-Care-Lower-Costs-Improve-Outcomes.htm>.

32. Despite slower growth in the first quarter of 2017, indicators show that the U.S. economy is in an upswing and is expected to continue solid growth into 2018. US Department of Commerce Bureau of Economic Analysis, "National Income and Product Accounts Gross Domestic Product: First Quarter 2017," April 28, 2017, <https://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm>. Nelson Schwartz, "G.D.P report shows U.S. economy off to slow start in 2017," New York Times, April 28, 2017, <https://www.nytimes.com/2017/04/28/business/economy/economy-gross-domestic-product-first-quarter.html>.
33. Jeff Cox, "Fed raises rates at March meeting," CNBC, March 15, 2017, <http://www.cnbc.com/2017/03/15/fed-raises-rates-at-march-meeting.html>.
34. Bureau of Labor Statistics, "The Employment Situation—April 2017," May 5, 2017, <https://www.bls.gov/news.release/emp.sit.nr0.htm>. Reuters, "Janet Yellen says the US is close to full employment," Fortune, Jan. 18, 2017, <http://fortune.com/2017/01/18/janet-yellen-federal-reserve-full-us-employment/>.
35. HRI analysis of historical and projected total per capita personal healthcare costs from the National Health Expenditure Accounts. Historical figures (1970 - 2015) were released in November 2016. Projected figures (2016 - 2018) were released in February 2017. HRI analysis of historical growth in the consumer price index from the Bureau of Labor Statistics (1970 - 2016). HRI analysis of projected growth in the consumer price index for the 2017 and 2018 time period from the National Health Expenditure Accounts (released February 2017).
36. Sean P. Keehan, Devin A. Stone, John A. Poisal, et al. "National Health Expenditure Projections, 2016-25: Price Increases, Aging Push Sector to 20 Percent of Economy," Health Affairs 36, No. 3, 2017.
37. HRI analysis of historical growth in the consumer price index from the Bureau of Labor Statistics (2010 - 2016). HRI analysis of projected growth in the consumer price index for the 2017 and 2018 time period from the National Health Expenditure Accounts (released February 2017). HRI analysis of wage data from Bureau of Labor Statistics and CBO's Employment Cost Index (Private Wages and Salaries). This represents all private wages and salaries across the economy, not just healthcare. Historical growth in wages from Bureau of Labor Statistics (2010 - 2016). HRI analysis of projected growth in wages for the 2017 and 2018 time period from CBO's January 2017 Budget and Economic Outlook. HRI analysis of hospital inpatient and physician market baskets from CMS Market Basket Index Levels and Four-Quarter Moving Average Percent Changes, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/MarketBasketData.html>.
38. Paul Fronstin and M. Christopher Roebuck, "The impact of an HSA-eligible health plan on health care services use and spending by worker income," Employee Benefit Research Institute, Issue Brief No. 425, August 2016, [https://www.ebri.org/pdf/briefspdf/EBRI\\_IB\\_425.Aug16.HSAs.pdf](https://www.ebri.org/pdf/briefspdf/EBRI_IB_425.Aug16.HSAs.pdf).
39. PwC Health Research Institute, "Medical Cost Trend: Behind the Numbers 2016," June 2015, <http://pwchealth.com/cgi-local/hregister.cgi/reg/pwc-hri-medical-cost-trend-2016.pdf>.
40. Zarek C. Brot-Goldberg, Amitabh Chandra, Benjamin R. Handel, Jonathan T. Kolstad, "What does a deductible do? The impact of cost-sharing on health care prices, quantities, and spending dynamics," National Bureau of Economic Research, October 2015, <http://www.nber.org/papers/w21632>.
41. PwC Health Research Institute, "Medical Cost Trend: Behind the Numbers 2014," June 2013, <https://www.pwc.com/us/en/health-industries/behind-the-numbers/assets/medical-cost-trend-behind-the-numbers-2014.pdf>.
42. PwC Health Research Institute, "Trump administration health policy agenda: House passes the American Health Care Act," May 4, 2017, <http://www.pwc.com/us/en/health-industries/health-research-institute/assets/pwc-hri-trump-policy-agenda-house-passes-american-health-care-act.pdf>.
43. US Food and Drug Administration, "Facts about Generic Drugs," [https://www.fda.gov/drugs/resourcesforyou/consumers/buyingusingmedicinesafely/understandinggenericdrugs/ucm167991.htm#\\_ftn3](https://www.fda.gov/drugs/resourcesforyou/consumers/buyingusingmedicinesafely/understandinggenericdrugs/ucm167991.htm#_ftn3).
44. Kaiser Health News, "More companies encourage increased use of generic medications," June 11, 2009, <http://khn.org/morning-breakout/dr00040769/>.
45. In 2018, sales revenue associated with branded, small molecule drugs going off patent rebounds to \$20.7 billion, an 86.5 percent increase over 2017. However, this is still lower than 2015 when sales revenue for branded drugs with patent expirations was \$27.7 billion. In addition, the impact of 2018 patent expirations will be felt mostly in 2019 and beyond. Optum, "2016: a 'mini-cliff' for drug patents," May 6, 2016, <https://www.optum.com/resources/library/2016-mini-cliff-for-drug-patents.html>.
46. A generic drug's manufacturer can secure six months of exclusivity by being the first to file an abbreviated new drug application containing a paragraph IV certification. A paragraph IV certification claims that a branded drug's patent(s) is invalid, unenforceable, or will not be infringed by the manufacture, use, or sale of the new generic drug. See: Federal Drug Administration, "Guidance for Industry 180-Day Exclusivity: Questions and Answers," January 2017, <https://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM536725.pdf>.
47. IMS Institute for Healthcare Informatics, "Delivering on the potential of biosimilar medicines: The role of functioning competitive markets," March 2016, [http://www.imshealth.com/files/web/IMSH%20Institute/Healthcare%20Briefs/Documents/IMS\\_Institute\\_Biosimilar\\_Brief\\_March\\_2016.pdf](http://www.imshealth.com/files/web/IMSH%20Institute/Healthcare%20Briefs/Documents/IMS_Institute_Biosimilar_Brief_March_2016.pdf).
48. Zachary Brennan, "FDA Approves 5th Biosimilar, 2nd for Remicade," Regulatory Affairs Professionals Society, April 21, 2017, <http://raps.org/Regulatory-Focus/News/2017/04/21/27390/FDA-Approves-5th-Biosimilar-2nd-for-Remicade/>. Pink Sheet, "Biosimilar cost savings in Europe beyond 25% might cull sponsors, EGA warned," June 8, 2015, <https://pink.pharmamedtechbi.com/PS056916/Biosimilar-Cost-Savings-In-Europe-Beyond-25-Might-Cull-Sponsors-EGA-Warned>.
49. Food and Drug Administration, "Generic Competition and Drug Prices," May 13, 2015, <https://www.fda.gov/aboutfda/centersoffices/officeofmedicinalproductsand tobacco/cder/ucm129385.htm>.
50. Andrew Pollack, "Drug goes from \$13.50 a tablet to \$750, overnight," New York Times, Sept. 20, 2015, <https://www.nytimes.com/2015/09/21/business/a-huge-overnight-increase-in-a-drugs-price-raises-protests.html>.
51. "Donald Trump's News Conference: Full Transcript and Video," The New York Times, Jan. 11, 2017, <https://www.nytimes.com/2017/01/11/us/politics/trump-press-conference-transcript.html>.
52. Zachary Tracer and Anna Edney, "Drug stocks plunge as Trump threatens to force price bidding," Bloomberg Markets, Jan. 11, 2017, <https://www.bloomberg.com/news/articles/2017-01-11/drug-stocks-plunge-as-trump-threatens-to-force-price-bidding>.
53. "Reviewing the rising price of EpiPens," Hearing, Full House Committee on Oversight and Government Reform, Sept. 21, 2016, <https://oversight.house.gov/hearing/reviewing-rising-price-epipens-2/>. "S. 469 - 115th Congress: Affordable and Safe Prescription Drug Importation Act," Congress.gov, Feb. 28, 2017, <https://www.congress.gov/bill/115th-congress/senate-bill/469?q=%7B%22search%22%3A%5B%22Affordable+and+Safe+5+Prescription+Drug+Importation+Act%22%5D%7D&r=3>.



54. PRNewswire, "Mylan Launches the First Generic for EpiPen Auto-Injector as an Authorized Generic," Dec. 16, 2016, <http://newsroom.mylan.com/2016-12-16-Mylan-Launches-the-First-Generic-for-EpiPen-epinephrine-injection-USP-Auto-Injector-as-an-Authorized-Generic>.
55. Lisa Schencker, "Marathon sheds \$89,000 muscular dystrophy drug after pricing uproar," Chicago Tribune, March 16, 2017, <http://www.chicagotribune.com/business/ct-marathon-sells-89000-drug-0317-biz-20170316-story.html>.
56. Jared Hopkins and Cristin Flanagan, "Pharma lobby ousts 22 drugmakers amid U.S. pricing debate," Bloomberg, May 9, 2017, <https://www.bloomberg.com/news/articles/2017-05-09/pharma-lobby-ousts-22-drugmakers-amid-u-s-pricing-debate>.
57. Allergan, "Our Social Contract with Patients," CEO Blog, Sept. 6, 2016, <https://www.allergan.com/news/ceo-blog/september-2016/our-social-contract-with-patients>.
58. Novo Nordisk, "Our Position on Pricing and Affordability," <http://www.novonordisk-us.com/whoweare/about-novo-nordisk/our-position-on-pricing-and-affordability.html>. Bill Berkrot, "AbbVie vows to keep drug price increases below 10 percent," Reuters, Jan. 11, 2017, <http://www.reuters.com/article/us-abbvie-pharmaceuticals-prices-idUSKBN14V2FK>.
59. Jacob S.Hacker, "The Road to Nowhere: The Genesis of President Clinton's Plan for Health Security," Princeton University Press, January 1997, <http://www.nytimes.com/books/first/h/hacker-nowhere.html>.
60. Milt Freudenheim, "Clinton's Health Plan; Drug Companies Feeling Pressure of Clinton's Plan to Keep Their Prices Down," New York Times, Sept. 30, 1993, <http://www.nytimes.com/1993/09/30/us/clinton-s-health-plan-drug-companies-feeling-pressure-clinton-s-plan-keep-their.html?pagewanted=all>.
61. Sara Ellison and Catherine Wolfram, "Coordinating on lower prices: pharmaceutical pricing under political pressure," RAND Journal of Economics, Vol. 37, No. 2, Summer 2006, [https://www.jstor.org/stable/25046244?seq=14#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/25046244?seq=14#page_scan_tab_contents).
62. Sara Ellison and Catherine Wolfram, "Coordinating on lower prices: pharmaceutical pricing under political pressure," RAND Journal of Economics, Vol. 37, No. 2, Summer 2006, [https://www.jstor.org/stable/25046244?seq=14#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/25046244?seq=14#page_scan_tab_contents).
63. US market share of top 10 pharmaceutical companies based on PwC Health Research Institute analysis of EvaluatePharma data.
64. According to a survey conducted by the Midwest Business Group on Health, managing specialty drugs has moved to the No. 1 health benefit priority for employers for 2017 and 2018 with 63% of employers indicating it's a top priority—up from No. 3 last year. Midwest Business Group on Health, "Managing specialty drugs and employee engagement are of greatest concern to employers in 2017," Nov. 29, 2016, <https://www.mbgh.org/blogs/mbgh-information/2016/12/09/managing-specialty-drugs-and-employee-engagement-are-of-greatest-concern-to-employers-in-2017?CommunityKey=35b5b617-72ae-4da3-b166-3ca44628b60b&tab=>.
65. Darla Dernovsek, "Specialty Medication Tools and Tactics for Employers," The Alliance, March 19, 2015, [http://www.the-alliance.org/Blog/Specialty\\_Medication\\_Tools\\_\\_\\_Tactics\\_for\\_Employers/](http://www.the-alliance.org/Blog/Specialty_Medication_Tools___Tactics_for_Employers/).
66. Mara G. Aspinall and Richard G. Hamermesh, "Realizing the Promise of Personalized Medicine," Harvard Business Review, <https://hbr.org/2007/10/realizing-the-promise-of-personalized-medicine>.
67. Joseph Walker, "Alliance of Companies Unveil First Steps Aimed at Cutting Health-Care Costs," Wall Street Journal, March 6, 2017, <https://www.specialtyrxtoolkit.org/sites/www.specialtyrxtoolkit.org/files/assets/Ind%20News%20Article%200317.pdf>.
68. Evan Sweeney, "Inova Health System bets big on precision medicine," FierceHealthcare, Feb. 28, 2017, <http://www.fiercehealthcare.com/analytics/inova-health-system-bets-big-precision-medicine>.
69. Suzanne Delbanco and Andrea Elizabeth Caballero, "The payment reform landscape: For employers, keep pushing ahead," Health Affairs, April 21, 2017, <http://healthaffairs.org/blog/2017/04/21/the-payment-reform-landscape-for-employers-keep-pushing-ahead/>.
70. Benjamin Sien, "Infused Therapies: Cost Savings Benefits Through Home Infusion," Specialty Pharmacy Times, Feb. 2014, <https://www.specialtypharmacytimes.com/publications/specialty-pharmacy-times/2014/february-2014/infused-therapies-cost-savings-benefits-through-home-infusion>.
71. Brenda Wright, "The growing home infusion industry," HomeCare, November 2016, <http://www.homecaremag.com/operations-strategies/november-2016/growing-home-infusion-industry>.
72. About 20 to 30 percent of new prescriptions are never filled at the pharmacy, and medication is not taken as prescribed approximately half the time. Such non-adherence is estimated to cause approximately 125,000 deaths per year and cost the healthcare system \$100 billion to \$290 billion annually. Food and Drug Administration, "Why you need to take your medications as prescribed or instructed," Feb. 16, 2016, <https://www.fda.gov/drugs/resourcesforyou/specialfeatures/ucm485545.htm>. Lisa Rosenbaum and William Shrank, "Taking our medicine—Improving adherence in the accountability era," New England Journal of Medicine, Aug. 23, 2013, <http://www.nejm.org/doi/pdf/10.1056/NEJMp1307084>.
73. Conn Hastings, "The Mabu Personal Healthcare Companion: Interview with Dr. Cory Kidd, Founder & CEO of Catalia Health," Medgadget.com, March 30, 2017, <https://www.medgadget.com/2017/03/mabu-personal-healthcare-companion-interview-dr-cory-kidd-founder-ceo-catalia-health.html>.
74. PwC Health Research Institute analysis of PwC Health and Well-being Touchstone Survey for 2017, Spring 2017.
75. PwC Health Research Institute, "Health reform 2.0: A guide to developing resilience amid an uncertain future for the Affordable Care Act," April 2017, <https://www.pwc.com/us/en/health-industries/health-research-institute/publications/assets/us-hri-health-reform-2.0.pdf>.
76. "H.R. 1628, American Health Care Act of 2017," 115th Congress (2017-2018), <https://www.congress.gov/bill/115th-congress/house-bill/1628/text>.
77. Patricia Cohen, "Jobless Rate at 10-Year Low as Hiring Grows and Wages Rise," New York Times, May 5, 2017, <https://www.nytimes.com/2017/05/05/business/economy/jobs-report-unemployment.html>.
78. PwC Health Research Institute analysis of PwC Health and Well-being Touchstone Survey for 2017, Spring 2017.
79. Bob Herman, "Hospitals have a labor problem," Axios, March 20, 2017, <https://www.axios.com/hospitals-have-a-labor-problem-2318410045.html>.
80. Leighton Ku, Erika Steinmetz, Erin Brantley and Brian Bruen, "The Economic and Employment Consequences of Repealing Federal Health Reform: A 50 State Analysis," Milken Institute of Public Health, January 5, 2017, [https://publichealth.gwu.edu/sites/default/files/downloads/HPM/Repealing\\_Federal\\_Health\\_Reform.pdf](https://publichealth.gwu.edu/sites/default/files/downloads/HPM/Repealing_Federal_Health_Reform.pdf).
81. Melissa Healy, "Four things Americans should know about Dr. Scott Gottlieb, the new head of the FDA," Los Angeles Times, May 10, 2017, <http://www.latimes.com/science/sciencenow/la-sci-sn-scott-gottlieb-fda-20170510-htmlstory.html>.
82. PwC Health Research Institute, "Health reform 2.0: A guide to developing resilience amid an uncertain future for the Affordable Care Act," April 2017, <https://www.pwc.com/us/en/health-industries/health-research-institute/publications/assets/us-hri-health-reform-2.0.pdf>.

83. PwC Washington National Tax Services, "What you need to know about tax reform," <http://www.pwc.com/us/en/washington-national-tax/us-tax-reform.html>.
84. PwC Health Research Institute, "Health reform 2.0: A guide to developing resilience amid an uncertain future for the Affordable Care Act," April 2017, <https://www.pwc.com/us/en/health-industries/health-research-institute/publications/assets/us-hri-health-reform-2.0.pdf>.
85. Kaiser Family Foundation, "2016 Employer Health Benefits Survey," Sep. 14, 2016, <http://kff.org/report-section/ehbs-2016-summary-of-findings/>. Bureau of Labor Statistics, "Average Hourly Earnings of Production and Nonsupervisory Employees," <https://data.bls.gov/timeseries/CES0500000008>.
86. Pharmaceutical Commerce, "Health Transformation Alliance sets its 2017 agenda," April 4, 2017, <http://pharmaceuticalcommerce.com/business-and-finance/health-transformation-alliance-sets-2017-agenda/>.
87. Carrum Health Results: <https://www.carrumhealth.com/#results>.
88. Midwest Business Group on Health, "Employers ready to implement new payment approaches and high performance networks to reduce health costs and improve outcomes," Aug. 2, 2016, <https://www.mbg.org/blogs/mbgh-information/2016/12/09/employers-ready-to-implement-new-payment-approaches-and-high-performance-networks-to-reduce-health-costs-and-improve-outcomes?CommunityKey=35b5b617-72ae-4da3-b166-3ca44628b60b&tab=>.
89. Bob Herman, "10 Statistics on Hospital Labor Costs as a Percentage of Operating Revenue", Becker's Hospital Review, December 10, 2013, <http://www.beckershospitalreview.com/finance/10-statistics-on-hospital-labor-costs-as-a-percentage-of-operating-revenue.html>.
90. Ed Silverman, "Rising drug prices are making hospitals feel ill," STAT News, Oct. 11, 2016, <https://www.statnews.com/pharmalot/2016/10/11/hospitals-drug-prices/>.
91. Melanie Evans, "Hospitals launch specialty pharmacies to curb drug costs," Modern Healthcare, Dec. 12, 2015, <http://www.modernhealthcare.com/article/20151212/MAGAZINE/312129963>.
92. PwC Health Research Institute, "Top health industry issues of 2017: A year of uncertainty and opportunity," Dec. 2016, <https://www.pwc.com/us/en/health-industries/pdf/pwc-hri-top-healthcare-issues-2017.pdf>.
93. PwC Health Research Institute, "The health insurer of the future: Consumers' advocate, providers' partner," March 2017, <https://www.pwc.com/us/en/health-industries/health-research-institute/publications/pdf/pwc-hri-payer-of-the-future.pdf>.
94. Rod Dunlap, "Robotic Process Automation: A Better Way to Boost Auto-Adjudication Rates," HFMA, June 6, 2016, <https://www.hfma.org/Content.aspx?id=48424>.
95. Katie Thomas, "Companies get strict on health of workers," New York Times, March 25, 2013, <http://www.nytimes.com/2013/03/26/business/companies-offer-workers-more-incentives-for-health-changes.html>.
96. PwC Health Research Institute, Health insurance executive survey, 2016-2017.
97. Rachel Sachs, Nicholas Bagley and Darius Lakdawalla, "Value-based pricing for pharmaceuticals in the Trump administration," Health Affairs, April 27, 2017, <http://healthaffairs.org/blog/2017/04/27/value-based-pricing-for-pharmaceuticals-in-the-trump-administration/>.
98. PwC Health Research Institute, "The health insurer of the future: Consumers' advocates, providers' partners," March 2017, <https://www.pwc.com/us/en/health-industries/health-research-institute/publications/pdf/pwc-hri-payer-of-the-future.pdf>.
99. United States Senate Committee on Finance, "Wyden-Grassley Sovaldi Investigation Finds Revenue-Driven Pricing Strategy Behind \$84,000 Hepatitis Drug," Dec. 1, 2015, <https://www.finance.senate.gov/ranking-members-news/wyden-grassley-sovaldi-investigation-finds-revenue-driven-pricing-strategy-behind-84-000-hepatitis-drug>.
100. National Conference of State Legislatures, "2015-2017 State Legislation on Prescription Drugs", April 10, 2017, <http://www.ncsl.org/research/health/prescription-drug-statenet-database.aspx>.
101. Ed Silverman, "How a \$37,000-a-year medicine sets a good model for drug pricing," STAT News, April 3, 2017, <https://www.statnews.com/2017/04/03/regeneron-drug-price-model/>.
102. Evan Sweeney, "Inova Health System bets big on precision medicine," FierceHealthcare, Feb. 28, 2017, <http://www.fiercehealthcare.com/analytics/inova-health-system-bets-big-precision-medicine>.
103. Gienna Shaw, "Help wanted Inova Health System expands training to build a precision medicine workforce," Fierce Healthcare, April 11, 2017, <http://www.fiercehealthcare.com/it/inova-health-precision-medicine-health-information-technology-job-openings>.
104. Stanford Medicine, "Stanford Medicine, Google team up to harness power of data science for health care," News Center, Aug. 8, 2016, <http://med.stanford.edu/news/all-news/2016/08/stanford-medicine-google-team-up-to-harness-power-of-data-science.html>.

## Acknowledgments

Brian Marcotte  
President and CEO  
National Business Group on Health

Charles Roehrig, PhD  
Founding Director, Center for  
Sustainable Health Spending, Institute  
Fellow  
Altarum Institute

Paul Hughes-Cromwick  
Co-director, Center for Sustainable  
Health Spending  
Altarum Institute

Ani Turner  
Co-director, Center for Sustainable  
Health Spending  
Altarum Institute

Micah Weinberg  
President  
Bay Area Council Economic Institute

Greg Malone  
Actuarial Senior Director  
Cigna

Brian Mackintosh  
Chief Actuary  
Neighborhood Health Plan

Larry Boress  
President and CEO  
Midwest Business Group on Health

Jim Kohan  
Senior Vice President and Chief  
Actuary  
Excellus BlueCross BlueShield

John Sivori  
President  
HealthNet Pharmaceutical Services

Mick Diede  
Chief Actuary  
Kaiser Permanente

Dan Rachfalski  
Senior Vice President and Chief  
Actuary  
Harvard Pilgrim Health Care

Michele Cusack  
Senior Vice President, Finance  
Northwell Health

Mary R. Grealy  
President  
Healthcare Leadership Council

Dan Polsky, PhD  
Executive Director  
University of Pennsylvania, Leonard  
Davis Institute of Health Economics

John Poisal  
Deputy Director, National Health  
Statistics Group  
Office of the Actuary  
Centers for Medicare and Medicaid  
Services

Sean Keehan  
Economist, National Health Statistics  
Group  
Office of the Actuary  
Centers for Medicare and Medicaid  
Services

Michael Thompson  
President and CEO  
National Alliance of Healthcare  
Purchaser Coalitions

Steve Sell  
President, Western Region  
HealthNet

Amy Yao  
Senior Vice President and Chief  
Actuary  
Blue Shield California

John Bertko  
Chief Actuary  
Covered California

Opoku Archampong  
Actuarial Director  
Geisinger Health Plan

John Stenson  
Vice President and Chief Actuary  
Aetna

Steve Whitcraft  
Director of Healthcare  
Turner Construction Company

David Lansky  
President and CEO  
Pacific Business Group on Health

## ***About this research***

Each year, PwC's Health Research Institute (HRI) projects the growth of private medical costs in the coming year and identifies the leading trend drivers. Insurance companies use medical cost trend to help set premiums by estimating what the same health plan this year will cost next year. In turn, employers use the information to make adjustments in benefit plan design to help offset cost increases. The report identifies and explains what it refers to as "inflators" and "deflators" to describe why and how the healthcare spending growth rate is affected.

This forward-looking report is based on the best available information through May 2017. HRI conducted interviews in February, March and April 2017 with 12 health plan executives (whose companies cover more than 100 million people) about their estimates for 2018 and the factors driving those trends. Findings from PwC's 2017 Health and Well-being Touchstone Survey of more than 780 employers from 37 industries, and PwC's national consumer survey of more than 1,000 US adults also are included. HRI also examined government data sources, journal articles and conference proceedings in determining the 2018 growth rate.

Behind the Numbers 2018 is HRI's twelfth report in this series.

## ***About Health Research Institute***

PwC's HRI provides new intelligence, perspectives and analysis on trends affecting all health-related industries. HRI helps executive decision-makers navigate change through primary research and collaborative exchange. Our views are shaped by a network of professionals with executive and day-to-day experience in the health industry. HRI research is independent and not sponsored by businesses, government or other institutions.

## ***About PwC***

PwC US helps organizations and individuals create the value they're looking for. Our 208,000 people are committed to delivering quality in assurance, tax and advisory services. Tell us what matters to you and find out more by visiting us at [www.pwc.com/us](http://www.pwc.com/us).

## ***PwC Health Research Institute***

Kelly Barnes  
Partner  
US Health Industries and Global  
Health Industries Consulting Leader  
kelly.a.barnes@pwc.com

Benjamin Isgur  
Health Research Institute Leader  
benjamin.isgur@pwc.com

Trine Tsouderos  
Director  
trine.k.tsouderos@pwc.com

Sarah Haflett  
Director  
sarah.e.haflett@pwc.com

Ben Comer  
Senior Manager  
benjamin.comer@pwc.com

Alexander Gaffney  
Senior Manager  
alexander.r.gaffney@pwc.com

Laura McLaughlin  
Senior Manager  
laura.r.mclaughlin@pwc.com

Rebecca Murphy  
Research Analyst  
rebecca.m.murphy@pwc.com

Jack Rodgers, PhD  
Managing Director, Health Policy  
Economics  
jack.rodgers@pwc.com

Kristen Bernie  
Manager, Health Policy Economics  
kristen.s.bernie@pwc.com

## ***HRI Advisory Team***

Joe Badalamenti  
Partner  
joe.badalamenti@pwc.com

Rick Judy  
Principal  
richard.m.judy@pwc.com

Kulleni Gebreyes  
Principal  
kulleni.gebreyes@pwc.com

Jim Prutow  
Principal  
jim.prutow @pwc.com

Jinn-Feng Lin  
Partner  
jinn-feng.lin@pwc.com

Mark St. George  
Principal  
mark.f.st.george@pwc.com

## ***Other Contributors***

David Atkinson, Lesley Bakker, Ron Barlow, Igor Belokrinitsky, Meredith Berger, Amy Bergner, Fabian Caceres, Joyjit Choudhury, Rob Franco, Jeff Gitlin, Barbara Gniewek, Jay Godla, John Grossomanides, Ken Hardy, Sandra Hunt, Karen LaChiana, Mike Longacre, Emily Medina, Barb Page, Mary Ross, Dinkar Saran, Hindy Shaman, Sundar Subramanian, Will Suvari, Penny Timmerman, Paul Veronneau, Brian Williams

**[www.pwc.com/us/medicalcosttrends](http://www.pwc.com/us/medicalcosttrends)**  
**[www.pwc.com/us/healthindustries](http://www.pwc.com/us/healthindustries)**  
**[www.pwc.com/hri](http://www.pwc.com/hri)**  
**[twitter.com/PwCHealth](https://twitter.com/PwCHealth)**

To have a deeper conversation  
about how this subject may affect  
your business, please contact:

Kelly Barnes  
Partner, US Health Industries and  
Global Health Industries Consulting  
Leader  
[kelly.a.barnes@pwc.com](mailto:kelly.a.barnes@pwc.com)  
214 754 5172

Rick Judy  
Principal  
[richard.m.judy@pwc.com](mailto:richard.m.judy@pwc.com)  
415 498 5218

Benjamin Isgur  
Health Research Institute Leader  
[benjamin.isgur@pwc.com](mailto:benjamin.isgur@pwc.com)  
214 754 5091

## CMS Nursing Home Compare and NYS DOH Nursing Home Quality Initiative Measures

The table below includes CMS and NYSDOH measures that indicates which measures are reported by CMS, included in the CMS Five-Star Rating and are included in the Nursing Home Quality Initiative (NHQI). The table also includes non-CMS measures that are included in the NHQI.

Measure Name	Measure Steward	Data Source	Displayed on CMS Nursing Home Compare	Included in CMS Five-Star Quality Rating	Included in NYS DOH Nursing Home Quality Initiative*
Percentage of <u>short-stay</u> residents who made improvements in function	CMS	MDS 3.0	Yes	Yes	No
Percentage of <u>short-stay</u> residents who were re-hospitalized after a nursing home admission	CMS	MDS 3.0, Medicare claims	Yes	Yes	No
Percentage of <u>short-stay</u> residents who have had an outpatient emergency department visit	CMS	MDS 3.0, Medicare claims	Yes	Yes	No
Percentage of <u>short-stay</u> residents who were successfully discharged to the community	CMS	MDS 3.0, Medicare claims	Yes	Yes	No
Percentage of <u>short-stay</u> residents who self-report moderate to severe pain	CMS	MDS 3.0	Yes	Yes	No
Percentage of <u>short-stay</u> residents with pressure ulcers that are new or worsened	CMS	MDS 3.0	Yes	Yes	No
Percentage of <u>short-stay</u> residents who newly received an antipsychotic medication	CMS	MDS 3.0	Yes	Yes	No
Percentage of <u>long-stay</u> residents experiencing one or more falls with major injury	CMS	MDS 3.0	Yes	Yes	Yes
Percentage of <u>long-stay</u> residents with a urinary tract infection	CMS	MDS 3.0	Yes	Yes	Yes
Percentage of <u>long-stay</u> residents who self-report moderate to severe pain	CMS	MDS 3.0	Yes	Yes	Yes, risk adjusted per CMS specifications

Measure Name	Measure Steward	Data Source	Displayed on CMS Nursing Home Compare	Included in CMS Five-Star Quality Rating	Included in NYS DOH Nursing Home Quality Initiative*
Percentage of <u>long-stay</u> high-risk residents with pressure ulcers	CMS	MDS 3.0	Yes	Yes	Yes, risk adjusted per NYS DOH model
Percentage of <u>long-stay</u> residents who have/had a catheter inserted and left in their bladder	CMS	MDS 3.0	Yes	Yes	No
Percentage of <u>long-stay</u> residents who were physically restrained	CMS	MDS 3.0	Yes	Yes	No
Percentage of <u>long-stay</u> residents whose ability to move independently worsened	CMS	MDS 3.0	Yes	Yes	No
Percentage of <u>long-stay</u> residents whose need for help with daily activities has increased	CMS	MDS 3.0	Yes	Yes	Yes
Percentage of <u>long-stay</u> residents who received an antipsychotic medication	CMS	MDS 3.0	Yes	Yes	No
Five-Star Quality Rating for Health Inspections <b>**Measure is included as a separate part of the Five-Star Rating system</b>	CMS	Health inspection survey data	Yes	<b>No **</b>	Yes, adjusted for regional differences
Percentage of <u>short-stay</u> residents assessed and given, appropriately, the seasonal influenza vaccine	CMS	MDS 3.0	Yes	No	No
Percentage of <u>short-stay</u> residents assessed and given, appropriately, the pneumococcal vaccine	CMS	MDS 3.0	Yes	No	No
Percentage of <u>long-stay</u> low-risk residents who lose control of their bowels or bladder	CMS	MDS 3.0	Yes	No	Yes
Percentage of <u>long-stay</u> residents who lose too much weight	CMS	MDS 3.0	Yes	No	Yes, risk adjusted per NYS DOH model



Measure Name	Measure Steward	Data Source	Displayed on CMS Nursing Home Compare	Included in CMS Five-Star Quality Rating	Included in NYS DOH Nursing Home Quality Initiative*
Percentage of <u>long-stay</u> residents who have depressive symptoms	CMS	MDS 3.0	Yes	No	Yes
Percentage of <u>long-stay</u> residents who received an antianxiety or hypnotic medication	CMS	MDS 3.0	Yes	No	No
Percentage of <u>long-stay</u> residents assessed and given, appropriately, the seasonal influenza vaccine	CMS	MDS 3.0	Yes	No	No
Percentage of <u>long-stay</u> residents assessed and given, appropriately, the pneumococcal vaccine	CMS	MDS 3.0	Yes	No	No
Percent of <u>long stay</u> residents who received the pneumococcal vaccine	CMS	MDS 3.0	No	No	Yes
Percent of <u>long stay</u> residents who received the seasonal influenza vaccine	CMS	MDS 3.0	No	No	Yes
Number of potentially avoidable hospitalizations per 10,000 long stay days	CMS/NYS DOH	MDS 3.0, SPARCS inpatient data	No	No	Yes
Percent of contract/agency staff used	NYS DOH	Nursing home cost reports	No	No	Yes
Rate of staff hours per day	NYS DOH	MDS 3.0, nursing home cost reports	No	No	Yes
Percent of <u>employees</u> vaccinated for influenza	NYS DOH	NYS DOH	No	No	Yes
Timely submission of <u>employee</u> influenza vaccination data	NYS DOH	NYS DOH	No	No	Yes

Measure Name	Measure Steward	Data Source	Displayed on CMS Nursing Home Compare	Included in CMS Five-Star Quality Rating	Included in NYS DOH Nursing Home Quality Initiative*
Timely submission of certified and complete nursing home cost reports	NYS DOH	NYS DOH	No	No	Yes
Percent of long stay residents with dementia who received an antipsychotic medication	Pharmacy Quality Alliance	MDS 3.0	No	No	Yes

\*The NYS DOH Nursing Home Quality Initiative excludes non-Medicaid facilities, Continuing Retirement Care Centers, Transitional Care Units, CMS-designated Special Focus Facilities, and specialty facilities or units within facilities designated for AIDS, pediatric specialty, traumatic brain injury, ventilator-dependent, and behavioral intervention.

**NOTE:** Other quality measures that are in development or the Department hopes to collect soon include:

- Advance directive compliance
- Resident satisfaction
- Family satisfaction
- Employee satisfaction



**Department  
of Health**

# **Recommendations for Revision of the Residential Health Care Facility Bed Need Methodology**

Health Planning Committee Report to the Public Health and Health Planning Council

**April 14, 2016**

# Methodology Background

- Public Health Law (PHL) §§ 2801-a and 2802 requires a finding of public need for establishment of a new Residential Health Care Facility (RHCF) or construction of an existing or new RHCF
- The RHCF need methodology is set forth in regulation (10 NYCRR § 709.3) and establishes criteria for determining whether such public need exists
- The methodology was initially implemented to determine the appropriate and efficient allocation of capacity within the long term care system, promoting access and financial sustainability

# Our Current Environment

- Changing demographics
- Increasing reliance on community-based services
- Delivery System Reform Incentive Payment (DSRIP) Program requirement to reduce avoidable hospital utilization
- Movement to value-based payments

# Recent Trends

- Declining utilization of RHCF beds
- Declining number of RHCF beds
- Conversion from municipal and non-profit ownership to for-profit status
- Continuation of Medicaid as the predominant payer for RHCF residents

# Statement of Goals for the Revised Methodology

The RHCF need methodology should be revised to support the following principles:

- The methodology should seek to ensure access to appropriate and available long term care settings
- In estimating need, the supply of all provider types (institutional and community-based settings) should be considered
- Sufficient flexibility should be afforded to allow consideration of local factors, including the special needs of a facility's population and the quality of nursing homes in the planning area, and allow responsiveness to the changing environment
- The need methodology should function as a guideline and is not meant to be an absolute predictor of the number of beds needed in each planning area
- The methodology should be effective for a duration that is only as long as is needed to understand the impact on long term care of ongoing transformative changes and trends in the health care system



# Revise the Methodology Effective for Five Years

- The methodology should be revised and should be effective for a five-year period (update the planning target year from 2016 to 2021)
- This will avoid the use of old data and projections that are too far into the future
- This also should allow sufficient time to assess the impact of ongoing initiatives and trends (including care management, DSRIP, value based purchasing, the movement towards community-based settings and the aging of the population), particularly the intersection of and alignment between these reforms and the long term care system
- During the interval, there should be a continuing reevaluation as to whether a methodology will be necessary in future years, and information should be collected and reviewed on an ongoing basis to assist in that consideration



# Collect Data and Reevaluate

- Information should be continually collected during the five year period to help assess options at the end of such interval, including data on:
  - the managed long term care population and the RHCF penetration rate, including the number of managed long term care plans in each planning area and enrollment
  - number and composition of long term care/post-acute provider networks across the State
  - growth in community-based provider supply (e.g. home care and assisted living)
  - RHCF occupancy trends, payer mix, case mix index and length of stay
  - source of referrals to RHCFs and utilization of RHCFs for non-custodial care, including care for individuals with short-term rehabilitative, ventilator, dementia and traumatic brain injury (TBI) needs
- Information should be presented to the Health Planning Committee at the end of the second, third and fourth years for purposes of such discussion



# Revise the Base Year and Trend Use Data

- The base year should be updated to 2014, which is the most recent data available
- In addition, the methodology should employ trended “use rates” for the planning area
- Further, to give a better profile of each planning area, the methodology should be revised so that planning area bed estimates are no longer blended with statewide figures



# Revise the Planning Areas

- While allowing consideration of adjacent areas, the methodology uses the county as the planning area except for New York City and Long Island, each of which is a separate planning area
- County boundaries are an appropriate starting point but do not reflect the full range of considerations relevant to bed need estimates, such as reflecting the sparsely populated nature of rural regions or recognizing the natural boundaries of a densely populated area with defined communities
- The methodology should be revised to treat counties (including each county within New York City and Long Island) as a starting point, but permit flexibility in redefining the planning area for a particular application based on factors such as population density and travel time (including mass transit availability, geography and typical weather patterns)

# Revise the Use of Migration Data

- The current methodology considers migration of individuals from their home counties to RHCFS in other counties by applying a universal migration adjustment, which may not be optimal in all planning regions
- To take a more nuanced approach, an adjustment should be applied in regions where appropriate



# Revise the Occupancy Rate Threshold

- Currently, if the overall occupancy rate in a planning area is less than 97 percent, the Department determines whether to decertify beds in connection with a renovation or ownership transfer application and considers “local factors” in this determination
- The 97 percent threshold level is high relative to actual experience, particularly because it does not differentiate subacute (short stay rehabilitation) utilization
- Therefore, the threshold should be revised to 95 percent for major renovations and for ownership transfers, while retaining consideration of “local factors”
- Local factors should include the size of the facility, its proximity/travel time to other facilities, configuration of the facility’s nursing units, special needs (including behavioral health) of the population served by the facility, percentage of Medicaid admissions and the quality of nursing homes in the planning area (using the Centers for Medicare and Medicaid Services quality measures)
- The 97 percent threshold should be retained for net new beds





**Department  
of Health**

# **New York State Department of Health**

## **GNYHA CON/Health Planning Roundtable**

Keith Servis, Deputy Director Office of Primary Care & Health Systems Management  
Tracy Raleigh, Director, Center for Planning, Licensure and Finance, OPCHSM

April 27, 2017

# Agenda

- Introductions
- DOH CON Streamlining Initiatives: Implemented and in Process
- Regulatory Modernization
- GNYHA Members input on Future CON Reform: What's Working? / What is Not?
- Questions and Answers

# CON Streamlining Workgroup: Initiatives Implemented



## Reduced CON Review Times

- Median processing time of CONs from Acknowledgement to Director Action, across all review levels, has decreased over 50% from 113 days in 2012 to 54 days in 2016, while volume of CONs increased almost 10%.

Year	Admin	Full	Ltd	All
2012	123	166	61	113
2016	55	129	20	54

- BAER average processing days across all review levels decreased over 70% in last three years from 135 days in 2014 to 32 days in 2016, while volume of CONs increased over 50%.

# Self Certification Policy & Process Improvements

- Policy and process improvements for AES projects implemented in May 2016 as part of Streamlining Workgroup with Industry participation:
  - Eliminated reviews of drawings.
  - Clarified and enhanced Eligibility Checklist and AES Process Flowchart to reduce number and frequency of ineligible submissions.
  - Simplified architect & engineer AES certification forms, letters, instructions and process.
  - Established a periodic DOH audit process of AES projects to educate design professionals and health care providers (in process).
- Observations regarding AES projects

# Pre Opening Survey Process Improvements

- Automated requests for pre-opening surveys in NYSE-CON.
- Clarified documentation required prior to pre-opening survey.
- Enhanced website to provide more information to providers and revised HFIS Form.
- Improved consistency in reviews.
- Standardized DOH administrative processes.
- Implemented Post-Approval customer satisfaction survey.
- Target metrics established and measuring performance.

# Standardization of Service Contracts

- Problem: Large volume of service contracts requiring review and approval as part of CON approval, with no standardized criteria for contracts or review, resulting in long delays in CON approval.
- Goal: Standardize protocols for service contracts to insure quick, efficient and legally sound review during the CON review process.
- Solution: New policy effective Dec. 10, 2016, applicable to all A28 facilities, to insure there are no illegal delegations of authority in service contracts while at the same time streamline the current process to insure uniformity and flexibility.
- All service contracts are required to have the following: a reserve powers clause, a conflicts clause, a notwithstanding Clause, and an attestation.

# CON Streamlining Workgroup: Initiatives In Process

## Increase Project Cost Thresholds for Hospitals

- Responsive to hospital industry goal to start construction projects sooner.
- The required regulatory changes to 710.1 are drafted and anticipated to be published in state register for public comment period in May, and to go before PHHPC at May/June cycle for information only, and July/August for adoption.
- Effective date of revised regulation is anticipated to be in August 2017.
- See attached Chart for proposed summary of amendments to 710.1.

# HIT Projects: Eliminate CON Prior Approval and replace with Notice

- **Current Regulation:**
  - Limited CON prior review and approval for HIT projects \$15M and under in value.
  - Administrative CON review and approval for HIT projects above \$15M in value
- **Proposed Regulation:**
  - No CON prior review and approval for HIT projects regardless of project value.
  - Construction Notice required for all HIT projects.
  - If HIT project includes any exchange of clinical information, a Certification form (Schedule 23) is required to be submitted with Notice.

# Future CON Streamlining / Regulatory Reform



# Regulatory Modernization

- Proposed Health Care Regulation Modernization Team did not pass in Final Budget.
- The DOH expects to implement the intent of the RMT to engage stakeholder input to identify statutes, regulations, and policies that impede or are needed to advance Triple Aim.
- Participation of about 24 members, representing a broad range of stakeholders including health care providers, workforce, community based organizations and consumer advocates and others.
- Scope and agenda are expected to include several proposed Executive Budget areas.
- Anticipated timeline: meetings Summer/Fall, recommendations and report by December 2017.

# GNYHA Members Input on areas for Future CON Reform

## What the DOH is hearing regarding CON: What's working / What is not?

- What is working?
  - NYSE-CON enhancements reducing CON processing times
  - Receipt of operating certificates
  - BAER review processing times improving
- What is not working?
  - Guidance and architectural standards for appropriate outpatient services, procedures and surgeries
  - Coordination among DOH, OMH and OASAS for jointly licensed facilities
  - Need more flexibility for governing models
  - Regulations to support delivery system reform and new models of care

# Questions and Answers

# Thank you for your continued partnership!

Keith Servis

Deputy Director, NYS DOH OPCHSM

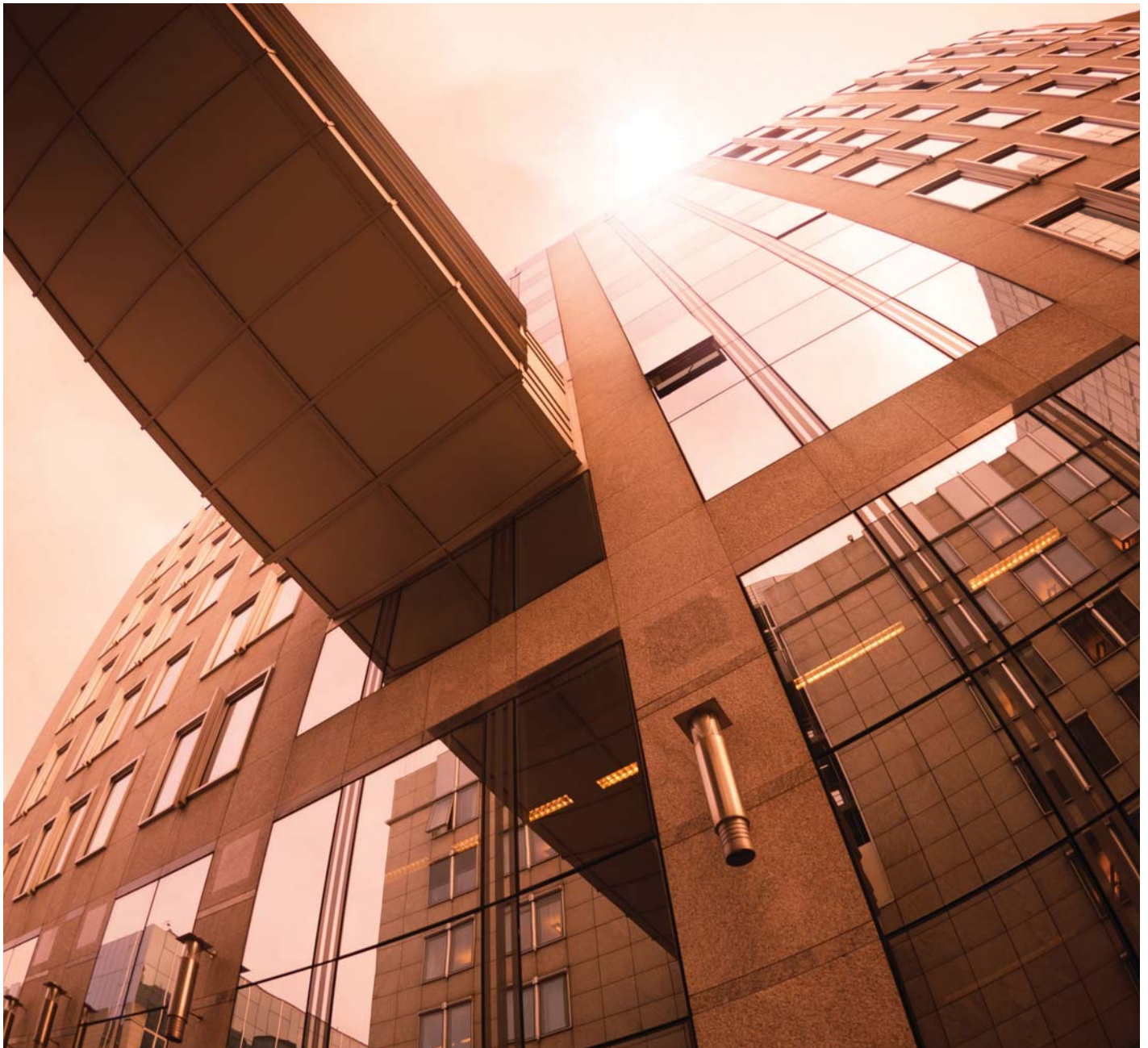
(518) 408-1828

Tracy Raleigh

Director Planning, Licensure and Finance, NYS DOH OPCHSM

(518) 402-0967

# Transforming **New York State's** Certificate of Need Program



Greater New York Hospital Association



# Transforming New York State's Certificate of Need Program

Greater New York Hospital Association (GNYHA) firmly believes that New York State's Certificate of Need (CON) program requires substantial reform to ensure that the State can best meet its overarching goal of improving health and health care while also controlling costs. Given the extraordinary evolution of the health care system since the State's CON program was created in 1964, its value and role in promoting cost control, quality, and access have diminished significantly. Many aspects of the program are unnecessarily complicated, expensive, and lengthy; it is both over- and under-inclusive; and it is dated in terms of the categories of projects it reviews and its methodologies. In fact, the program often undermines its intended goals by adding significant costs to the health care system and interfering with the efficient operation of health care facilities without clearly improving either quality or access. For similar reasons, many states have eliminated their CON programs entirely, while others have substantially limited the number of services, providers, and projects subject to review.



GNYHA therefore urges New York to:

- End the program's review of construction, renovations, and the acquisition or movement of equipment and services in general, almost all of which the State approves at unnecessary expense to the State and the providers involved.
- Focus primarily on the establishment of new providers; the introduction of new services that may require review to promote quality and access; the discontinuation of services that may create access problems; and certain identified services, such as proton beam therapy, that are exceptionally expensive or may cause an unnecessary proliferation of expensive services.
- Streamline its approach to ensuring facility compliance with construction, life safety, and other codes by relying on a combination of facility, architect, and engineering certifications, use of outside experts, and other approaches that will help expedite reviews for all involved.

**Recent Reforms and Need for More Fundamental Change:** GNYHA recognizes that the State recently implemented changes to its CON program to reduce the level of review required for certain projects. GNYHA also recognizes that New York is in the process of implementing a new State law that exempts from review repair and maintenance projects, non-clinical infrastructure projects, and one-for-one replacements of equipment, provided that notice and architect and/or engineering certifications are submitted. GNYHA and its members are grateful for these changes and for the State's implementation of an electronic system for submitting CON applications.

2

GNYHA believes, however, that more fundamental reforms are required, given the increasing financial pressures facing providers and the State, the fact that many aspects of the program are unnecessary in today's environment, and the unreasonable burdens often imposed by the program. When New York put forward its recent threshold changes, it characterized them as an "initial phase" of reform and stated that they were designed to focus the State's resources on "projects that involve the delivery of highly complex services, the investment of substantial resources, and/or the creation of new facilities or beds." It is time to move fully in that direction, for the benefit of the State, its providers, and most important, the residents of New York.

### **I. CON Programs Are Ill-Suited for Controlling Costs in Today's Environment**

As currently structured, New York's CON program no longer effectively serves its intended purpose of promoting cost control, quality, and access given the tremendous changes that have taken place since the program began in 1964. Historically, the primary rea-

son for CON programs was to control costs, particularly capital costs, during a time of cost-based reimbursement. Thus, in 1975, Congress passed the National Health Planning and Resources Development Act of 1974 (the Act), which required states to create CON programs to receive funding under a number of Federal programs. But in 1986, with the advent of prospective payment systems and other factors, the Federal government repealed this mandate and its funding for planning purposes. In the decade following the Act's repeal, many states in turn repealed their CON programs, and many more have since reduced the number of projects they review.

**Myriad Environmental Factors Limit Provider Capital Expenditures:** Today, many factors significantly limit the ability of hospitals and other health care providers to embark on capital projects, thereby eliminating the need for many aspects of CON programs. Those factors include limited capital reimbursement, ever-increasing limitations on operating revenues, and increases in both operating and capital costs. In addition, changes in the capital markets have made it increasingly difficult for providers to finance capital projects.

At the Federal level, the Medicare program has not, in general, paid hospitals for their hospital-specific operating costs since 1983, paying them instead under a prospective payment system. It has also not paid hospitals for their hospital-specific capital costs for years. In 2009, hospitals agreed to a significant cut in Medicare payments for the next 10 years in connection with the passage of the Affordable Care Act. Hospitals are now bracing for additional Medicare cuts given the current Federal debt ceiling and related economic problems, with the 2% reduction in payments triggered by Federal sequestration perhaps being only the starting point.

In New York, Medicaid payments to hospitals have been cut 10 times over the last five years for a cumulative loss to hospitals of \$1.4 billion a year. In addition, during State fiscal years 2011–12 and 2012–13, State-share Medicaid payments are subject to a “global cap” under which provider payments can be cut if the cap is exceeded. The global cap, an important achievement of the State's Medicaid Redesign Team, has been one of the most effective cost control tools the State has put in place for many years, and is more effective than the project-by-project approach inherent in CON programs. At the same time, all payers are creating incentives and mechanisms to constrain health care costs, including bundled payments, health homes, medical homes, managed care focused on specific types of populations, and accountable care organizations.

**Provider Difficulty Accessing Capital:** Many hospitals in New York have considerable trouble accessing capital due in part to their poor credit quality, their heavy dependence on

shrinking Medicare and Medicaid payments, and the lengthy State process for approving construction and financings. As a result, they have had to rely on credit enhancement, such as the much-appreciated Federal Housing Administration's mortgage insurance program or State-supported debt, which increases the time needed to gain approval of projects. These factors are reflected by the fact that the average age of hospital plant in New York is 12.1 years, compared to 9.8 years nationally.

**Questionable Success in Controlling Costs:** Not only is using CON programs to control spending unnecessary today, some studies have indicated that CON programs may never have been particularly successful in controlling costs. For example, in 2004, the U.S. Department of Justice (DOJ) and the Federal Trade Commission (FTC) released a report discussing many aspects of health care. On the issue of CONs, the report stated: "Empirical studies indicate that CON programs generally fail to control costs and can actually lead to increased prices." The report quoted one commentator as stating "[t]he regulation of supply through mechanisms such as CON may have made sense when most reimbursement was cost-based and thus there was incentive to expand regardless of demand but they make much less sense today when hospitals are paid a fixed amount for services and managed care forces them to compete both to participate in managed-care networks and then for the plans' patients." The agencies thus urged CON states "to reconsider whether they are best serving their citizens' health care needs by allowing these programs to continue."<sup>1</sup>

4

GNHYHA notes that the American Health Planning Association took significant issue with the report, calling its conclusions "unsupported."<sup>2</sup>

**No Surge in Spending Following CON Program Elimination:** At least one still often-quoted study from 1998 published in the *Journal of Health Politics, Policy and Law* looked at what happens to health care spending when CON programs are eliminated, given that a number of states had discontinued their CON programs in the decade after the Federal government repealed its mandate for CON programs in 1986. The study concluded that states that had "lifted CON did not experience a rise in spending on hospital and physicians' services relative to those that retained it." The authors thus stated that there was "no reason to fear an expenditure surge" after CON laws are repealed.<sup>3</sup>

As outlined above, New York no longer needs a comprehensive CON program to control capital expenditures because numerous external factors attempt to control those expenditures every day. In addition, studies indicate that CON programs are not particularly successful at controlling costs and that capital expenditures do not necessarily increase following the repeal of CON programs.

## II. CON Programs Have Limited Value in Promoting Quality

Turning to CON programs' other goal, ensuring quality and access to care, GNYHA believes strongly that today's health care environment provides more effective, ongoing approaches to overseeing or incentivizing accessible, quality health care than that afforded by many aspects of the State's comprehensive CON program. In New York, the State Department of Health (DOH) exercises significant oversight of the quality of care provided by health care providers, most of which are subject to extensive State regulations and requirements. DOH is joined by a number of other State agencies in fulfilling its oversight role, depending on the provider type and the services delivered. The Centers for Medicare & Medicaid Services and The Joint Commission also impose significant regulatory and accreditation requirements and standards. For example:

- Numerous agencies survey and require plans of correction for health care providers.
- Medicare collects and makes public many quality indicators for each hospital.
- New York State collects, analyzes, and makes public information about cardiac procedures, infection rates, and a number of other quality indicators.
- New York State also makes public volume data for most major procedures by hospital.
- New York State requires hospitals to track and make public upon request data related to nursing-sensitive indicators.
- Many other organizations also publish "report cards" on hospitals and other providers, including Leapfrog, HealthGrades, and The Joint Commission.
- Medicare and Medicaid refuse to pay for certain adverse events and hospital-acquired conditions.
- In Federal fiscal year 2013, Medicare will begin its value-based purchasing (VBP) program, under which Medicare will adjust hospital payments based on how well a hospital performs under a number of process-of-care measures.
- In Federal fiscal year 2014, Medicare will expand its VBP program to base Medicare payments on outcomes of care and efficiency measures.

**High Quality in Non-CON States:** While there are many rankings of hospitals, perhaps the most well-known is *U.S. News & World Report's* annual "America's Best Hospitals," which ranks hospital services across the country. The ranking includes an "Honor Roll of Hospitals," and the most recent edition includes 17 hospitals across the country, including NewYork-Presbyterian Hospital and Mount Sinai Hospital Center. GNYHA mentions the Honor Roll to point out that a number of the top-ranked hospitals are located in states that do *not* have CON programs, including the Mayo Clinic, Ronald Reagan UCLA Medical Center, UCSF Medical Center, Hospital of the University of Pennsylvania, University

of Pittsburgh Medical Center, and Stanford Hospital and Clinics. Although many factors affect the quality of care in the Honor Roll hospitals, the number of hospitals in states without CON programs indicates it is certainly not necessary to have such a program to offer high-quality, nationally ranked care.

**Negative Impact of Stringent CON Programs:** An early study by Stephen M. Shortell, Ph.D., and Edward F.X. Hughes, M.D., Ph.D., found an association between *higher mortality rates* among inpatients and the stringency of state CON programs, suggesting that CON programs may actually have a *negative* impact on quality. The authors examined mortality rates among Medicare patients for 16 clinical conditions at 981 hospitals and concluded that the stringency of CON programs was positively and significantly associated with higher mortality rates.<sup>4</sup>

The authors found this association of interest because one might expect that stricter CON programs would be associated with *lower mortality rates* given that the process often examines whether patient volume is sufficient to produce positive outcomes. The contrary argument posited was that CON programs might act as a “barrier to the development of innovative programs and the possible upgrading of hospitals’ physical plants and equipment. Thus, patients at hospitals whose applications for certificates of need have been rejected and those who may not have applied because of the stringent review criteria may have poorer outcomes because the hospitals continue to provide care with outdated facilities and technology.” To test this, the authors examined the mortality rates related to the five conditions considered the most susceptible to CON program impacts, as opposed to the 11 less susceptible conditions. According to the authors, “The association of higher mortality rates with more stringent certificate-of-need programs was indeed stronger and had a higher level of significance for the 5 conditions defined as the most susceptible... than for the remaining 11 conditions...These findings indicate that regulation of capital expenditures appears to have particularly adverse effects on outcomes for patients with the conditions most directly affected by the regulation.”

**Unclear Benefits of CON Regulation of Coronary Artery Bypass Graft Surgery:** Later studies bring into question the benefits of CON programs with respect to regulating even coronary artery bypass graft (CABG) surgery specifically, a service where higher volumes are linked to better outcomes. Thus, it is often assumed that CON programs should be beneficial in that they typically regulate how many and which providers may offer open-heart surgery. In one 2002 study published in the *Journal of the American Medical Association* that looked at this issue, the authors concluded, as expected, that CABG mortality rates in states that do not regulate open-heart surgery through CON programs were statistically higher than in states

that do regulate this service. Also as expected, a higher proportion of patients in states without CON regulation of open-heart surgery underwent CABG surgery in low-volume hospitals.<sup>5</sup>

However, in another study, published in *HSR: Health Services Research* in 2009, the authors concluded that states that discontinued their reviews of cardiac CONs experienced lower CABG mortality rates relative to states that kept their CON programs in this regard, although this difference was not found to be permanent.<sup>6</sup>

In still another study, published in 2006 in *Circulation: Journal of the American Heart Association*, the authors found that while average annual hospital CABG surgery volume was higher in states with CON regulation compared to states without CON regulation, there was no significant difference in CABG surgery mortality rates between the two. According to the authors, “The present data suggest that state CON laws are not a sufficient mechanism to ensure quality of care for CABG surgery.”<sup>7</sup>

GNYHA recognizes that there are many factors that affect quality and outcomes as suggested by the study published in *Circulation* referenced above and that states can—and do—administer their CON programs differently. However, the seemingly disparate results of the studies cited above should be considered in reviewing the value, scope, and application of CON programs.

**CON Programs as Potential Barriers to Higher-Quality Services:** On the issue of quality, the DOJ and FTC report referenced earlier commented that CON programs can impede the entry of providers or services that can provide higher-quality care. The agencies therefore concluded that there are more effective means of enhancing quality and access that do not pose some of the anticompetitive risks of CON programs.<sup>8</sup>

The foregoing discussion reinforces that CON programs are not, in general, necessary in today's environment to ensure that quality care is provided, except perhaps in certain limited circumstances where the volume of procedures performed helps to improve the quality of care. Even on that subject, though, opinions differ as to whether and how much CON programs are helpful in this respect. Conversely, there are arguments that CON programs can negatively affect health care quality because they can slow or discourage the entry of new services or needed improvements.

### III. New York's Recognition of Its CON Program's Limitations

Over the years, New York has recognized the eroding value of its CON program in meeting its intended purposes. For example, in 1996, the Public Health Council adopted a re-

port, *Recommendations for Reform of the Establishment and CON Functions*. The report reviewed the history of CON in New York and concluded that, because the program was developed for an earlier era, it was “ill-suited” for an environment that paid hospitals on the basis of a prospective payment system, encouraged the growth of managed care, and demanded that providers deliver services more efficiently. As a result, the report recommended that need determinations be eliminated in most cases and that, for the great majority of activities, including construction projects, expansions of services, and changes in services, “the role of government should be limited to assuring that services are provided according to standards set by the state with, as much as is possible, standards tied to measures of outcomes.”<sup>9</sup>

Similarly, in 1998, DOH commented in the *New York State Register* that the CON program had been designed to promote “judicious use of publicly funded capital” and to help ensure access to quality health care services. “However, the changing health care system, the growth of managed care, and the passage of the Health Care Reform Act have made it possible to achieve these goals with a CON program that is less stringent and more supportive of today’s more market-oriented health care environment.”<sup>10</sup> At that time, DOH increased the thresholds for CON review, citing the fact that the changes would help reduce the cost of filing CON applications, lost revenues, and limits on competitive capacity associated with the program. As noted earlier, in proposing additional reforms of the program in 2010, DOH stated that the reforms were being put forward as an initial phase and were aimed at focusing the resources of the State more appropriately and at reducing costs to providers.

#### IV. The Unnecessarily High Cost of New York’s CON Program

The prior sections demonstrate how the need for CON programs has diminished over time. Using CON programs to control capital expenditures has become much less important in an era of prospective payment systems, limited capital reimbursement, relentless payment cuts, and movements to new reimbursement systems and approaches.

At the same time, the delays associated with filing and gaining approval of CON applications in New York, particularly for construction, renovations, acquisition and/or installation of equipment or movement of services, have become unreasonable, notwithstanding the streamlining initiatives the State has undertaken over the last several years.

There seem to be at least two points of considerable delay in the State’s approval of construction, renovations, movement of services or acquisition and/or installation of equipment: 1) at the point that DOH’s architectural bureau undertakes an initial review of

a project's schematic design, and 2) at the point that DOH's regional offices undertake surveys of completed construction before providers occupy the renovated or new space.

**Significant Delays in Processing Times:** GNYHA recently asked a number of its members about the average time it takes to obtain CON approval of their projects. The following represents the range of waiting periods generally reported, not including the time it takes to gain approval of final construction drawings required for administrative and full review projects:

- **Limited Review Projects:** 3–6 months
- **Administrative Review Projects:** 6–11 months
- **Full Review Projects:** 6–12 months

GNYHA notes that many hospitals reported that approvals of some of their applications are taking much longer than the above time frames, even though the affected projects might have “priority” status because, for example, they are funded in part by Health Efficiency and Accountability Law for all New Yorkers (HEAL NY) funds. On the other hand, one member reported an average waiting period of only two to four months for its limited review approvals, although the same member also reported the longest waiting periods for approval of its administrative and full review projects. Finally, several hospitals reported waiting significant periods of time for approval of their final construction drawings before they can begin construction.

By way of comparison, when DOH increased its review thresholds in 1998, it commented that the changes would help save costs associated with processing projects at higher levels of review. In support of those changes, DOH reported in the August 19, 1998, *State Register* the following processing times for CON projects in 1996:

- **Administrative Review Projects:** 41 days
- **Full Review Projects:** 163 days

As can be seen, the CON processing times experienced by many hospitals today are materially *longer* than they were in 1996, notwithstanding two sets of much-appreciated threshold increases and good faith attempts by DOH at streamlining the process since then. While GNYHA recognizes that the waiting times include time frames when DOH is waiting for hospitals to reply to questions posed by DOH, the total time currently required to approve a CON application of any kind is unnecessarily long and must be reduced for the benefit of all involved.



**Significant Delays in Scheduling Pre-Opening Surveys:** At the other end of the process, hospitals are finding that it can take months to schedule pre-opening surveys of their renovated or new space so they can occupy it. Hospitals have reported that it can take up to four months to schedule a survey, even when they begin the scheduling process well before the project's completion. In addition, hospitals find there are often inconsistencies in positions taken among surveyors, as well as between regional office surveyors and personnel in Albany that can take significant time to untangle.

**The Resulting Cost of the CON Program:** GNYHA recognizes that the foregoing delays are caused, in part, by limited staffing due to State budget and other constraints. However, the delays and problems have in turn caused providers and the health care system at large to incur considerable and unnecessary costs in the form of:

- Increased construction and equipment acquisition costs, which, according to DOH, have increased anywhere from 4% to 12% *annually* over the last 10 years;
- Increased costs for outside architects, engineers, consultants, and attorneys;
- Increased personnel costs related to responding to questions, submitting additional information, and gaining approval of applications;
- Delays and interruptions in patient care; and
- Delays and interruptions in receiving revenues related to affected services.

To illustrate the associated increased cost of construction, a six-month delay in a \$100 million construction project at a time when construction costs might rise at an annual rate of 6% adds as much as \$3 million to the project's cost. This incremental cost means that projects needed to upgrade New York's outdated physical plants are either deferred or decreased in the service levels they provide, or alternatively, the unnecessary additional costs are assumed by providers and/or shifted in part to payers. Viewed across the entire State, such delays increase total health care spending significantly, often with no discernable benefit in terms of quality, access, and cost control.

The foregoing delays, costs, and consumption of health care resources are unfortunate at any time and for any reason. However, the diminished value of CON programs makes the costs all the more unfortunate, thereby dictating that New York must significantly revise its program.

## V. Recommendations for Transforming the CON Program

As outlined above, CON programs no longer effectively serve their initial purposes of controlling costs and promoting quality and access, given the evolution of the health care sys-

tem. At the same time, they are often unreasonably costly, burdensome, and complicated. A cost/benefit analysis of New York's program leads to the clear conclusion that the program must be transformed so that both the State and providers can better focus their efforts on improving quality, patient safety, and access in the most productive and meaningful ways. GNYHA therefore makes the following recommendations:

**Eliminate Construction Reviews:** GNYHA strongly recommends that the State eliminate all CON reviews of construction, including all renovations, additions, and acquisitions or movement of equipment or services, regardless of cost. To the extent that such activities might involve adding services that the State wishes to regulate in some fashion, the State should review only the addition of that service and not the related construction. GNYHA recognizes the importance of ensuring that construction complies with the requisite building, life safety, and other codes for the protection of all who enter health care facilities, and discusses how this should be accomplished in Section VI.

The foregoing is consistent with the route many states have taken with respect to their CON programs. Fourteen states do not have CON programs at all, including Pennsylvania, California, Wisconsin, Minnesota, and Texas. In addition, many states with some form of CON programs do not require review of hospital construction except perhaps in connection with the establishment of entirely new facilities. States that do not review construction as part of their CON programs include Connecticut, New Jersey, Ohio, and Florida.

**Assess the Need to Review Certain Providers and Services:** GNYHA strongly recommends that the State undertake a thoughtful but expeditious review of what services or providers it should subject to continuing CON review. As part of this deliberation, GNYHA suggests that there are several main categories in which the State's CON program may still play a meaningful role of protecting and promoting quality and access, as well as reducing unnecessary expenditures.

- **New Entrants:** GNYHA believes the CON program can serve a valuable purpose through its establishment process by ensuring, to the extent possible, that new providers are qualified and capable of delivering quality care and that they are willing to ensure meaningful access to their services. GNYHA understands that the State is already planning to look at ways to do this more effectively.
- **Protecting Key Providers:** As part of the process for reviewing the establishment of new providers, the State should also ensure that a new provider's entry does not materially undermine the services being provided by existing key or essential providers or add

unnecessary costs to the health care system. While GNYHA recognizes that this issue is sensitive and arguably raises anti-competitive concerns, we firmly believe that the State must be cognizant of the negative impact on quality and access that might occur should a new provider enter an area and undermine the services provided by an existing needed health care provider. The classic example is the entry of a freestanding, non-hospital-owned ambulatory surgery center that will deliberately or otherwise divert a significant number of certain services from area hospitals, leaving hospitals with the overhead of providing emergency services, trauma care, critical care, and other needed community services without the revenues to cover the cost of that care.

- **Addition of Services Where Volume and Quality Are Linked:** The program should oversee the introduction of services where there is a clear relationship between volume and quality, such as certain cardiac procedures.
- **Exceptional Services:** The program should oversee the expansion of services or modalities determined to be exceptional either because of their high costs (e.g., proton beam therapy) and/or their tendency to generate unnecessary volumes of procedures.
- **Discontinuance of Certain Services:** The program, or at least the State in some form, should review the discontinuance of services that will lead to access problems in certain communities.

12

**Necessity of Updated Need Methodologies or Criteria:** Many of the foregoing areas that GNYHA recommends should be considered for continuing CON review require updated need methodologies or criteria. GNYHA offers to assist the State's efforts by participating in that process directly, and/or identifying experts among its members who can provide valuable input into the process.

**Need for a Level Playing Field, Fixed Time Frames for Review, and Streamlined Processes:** Finally, to the extent that services, providers, or equipment remain subject to review, the State should:

- Ensure a level playing field among different types of providers in terms of review and oversight.
- Be required to undertake its reviews within reasonable time frames at all stages of the approval process.
- Streamline its review and survey processes for the benefit of providers and the State. *See Section VI for recommendations for streamlining the review and survey processes.*

## VI. Streamlining the State's Review and Survey Processes

GNYHA is hopeful that the State will eliminate from CON review all construction projects and certain equipment acquisitions for existing providers. GNYHA recognizes, however, that the State will still retain its role of licensing authority and therefore have the responsibility of ensuring that construction, services, and equipment comply with relevant building, design, and life safety codes, as well as other requirements specific to health care providers.

As the State carries out this responsibility, either in conjunction with remaining CON reviews or separately, GNYHA strongly urges DOH to undertake this role as efficiently and effectively as reasonably possible. GNYHA emphasizes this because the regulatory functions of overseeing design and occupancy, which have been built into the State's CON program, are among the functions causing delays in processing CON applications today. Therefore, as DOH continues to exercise oversight of these areas, GNYHA strongly urges that DOH do so in a streamlined and efficient manner so that it fulfills its responsibilities without triggering unnecessary costs to the health care system.

### **Minimize the Number of Projects Subject to DOH Design and/or Pre-Opening Review:**

GNYHA strongly urges the State to eliminate as many projects as possible from direct DOH design review and/or pre-opening surveys. Health care providers are already subject to extensive and detailed national building, design, and life safety requirements that are incorporated by reference in State and Federal regulations and The Joint Commission standards, all of which are designed to protect and promote patient safety. Providers are also subject to local building, fire, and other codes, as well as various types of local agency inspections before, during, and after construction that are aimed at protecting all who enter the buildings. In addition, many hospitals have extensive facilities, architectural, engineering, and other departments that are regularly involved in planning and overseeing construction. Separate from in-house capabilities, health care construction projects almost always involve outside licensed architects, engineers, consultants, and, in some cases, construction managers. Finally, providers are subject to ongoing, regular inspections and surveys meant to identify any life safety code concerns and promote patient safety.

**Alternatives to DOH Reviews and Surveys:** To the extent that the State believes it must exercise oversight given the particular project involved, GNYHA believes that the following approaches and alternatives to direct DOH review and survey should be acceptable, many of which are exercised by other states in fulfilling their regulatory roles.

- Meeting with providers to review their plans early in the project planning stages.

- Accepting provider notification of a planned project and certification of compliance with relevant codes.
- Accepting certification as to code compliance by the provider's architects and/or engineers, all of whom are presumably licensed by the State.
- When necessary, scheduling appointments with the provider's team of facility personnel and outside architects and engineers to review plans for the project with the aim of completing the review in one sitting to the extent possible and appropriate.
- Developing a panel of experts who can be called upon to assist with planning, reviews, and surveys.
- Contracting with other state agencies to undertake reviews and/or inspections. In some states, central design personnel review plans. In New York, GNYHA endorses use of architects and engineers at the Dormitory Authority of the State of New York for this purpose.
- Permitting providers to occupy finished space without requiring a pre-opening survey and allowing any necessary surveys for certain projects and space to take place at a later point in time.

**Improved Review and Survey Processes:** To the extent that the State assumes direct responsibility for certain reviews or surveys, it should develop improved processes for undertaking those functions. GNYHA suggests that the State consider engaging an expert in process engineering to review its procedures for undertaking reviews and surveys to streamline the processes as much as possible. In addition, the State should establish specified time frames for completing its reviews. GNYHA has spoken with personnel in a number of states that review plans and undertake pre-opening surveys. Almost to a state, they seem to be able to undertake their activities within 30, 45, 60, or maybe 90 days. New York must address its lengthy review and survey processes, which are unnecessarily expensive for all involved.

**Need for Increased Staffing at DOH:** As noted, GNYHA appreciates that the delays in processing applications and undertaking surveys are attributable, in part, to State cutbacks in personnel and inadequate numbers of staff for these purposes. GNYHA therefore urges the State to dedicate sufficient personnel to the functions it retains to minimize unnecessary costs to the health care system and ultimately to the State itself.

**GNYHA's and Members' Commitment to Improving Quality and Patient Safety:** In making the foregoing recommendations, GNYHA emphasizes that it and its members are committed to improving quality and access and protecting patient safety at all times. Indeed, great efforts are taken to protect patients and employees in the planning, building, renovating, and opening of health care facilities. But these very efforts, together with the exten-

sive efforts, certifications, and oversight by licensed architects and engineers, consultants, construction managers, and local authorities, should form the foundation of the State's review, thereby minimizing the amount of additional oversight the State needs to provide.

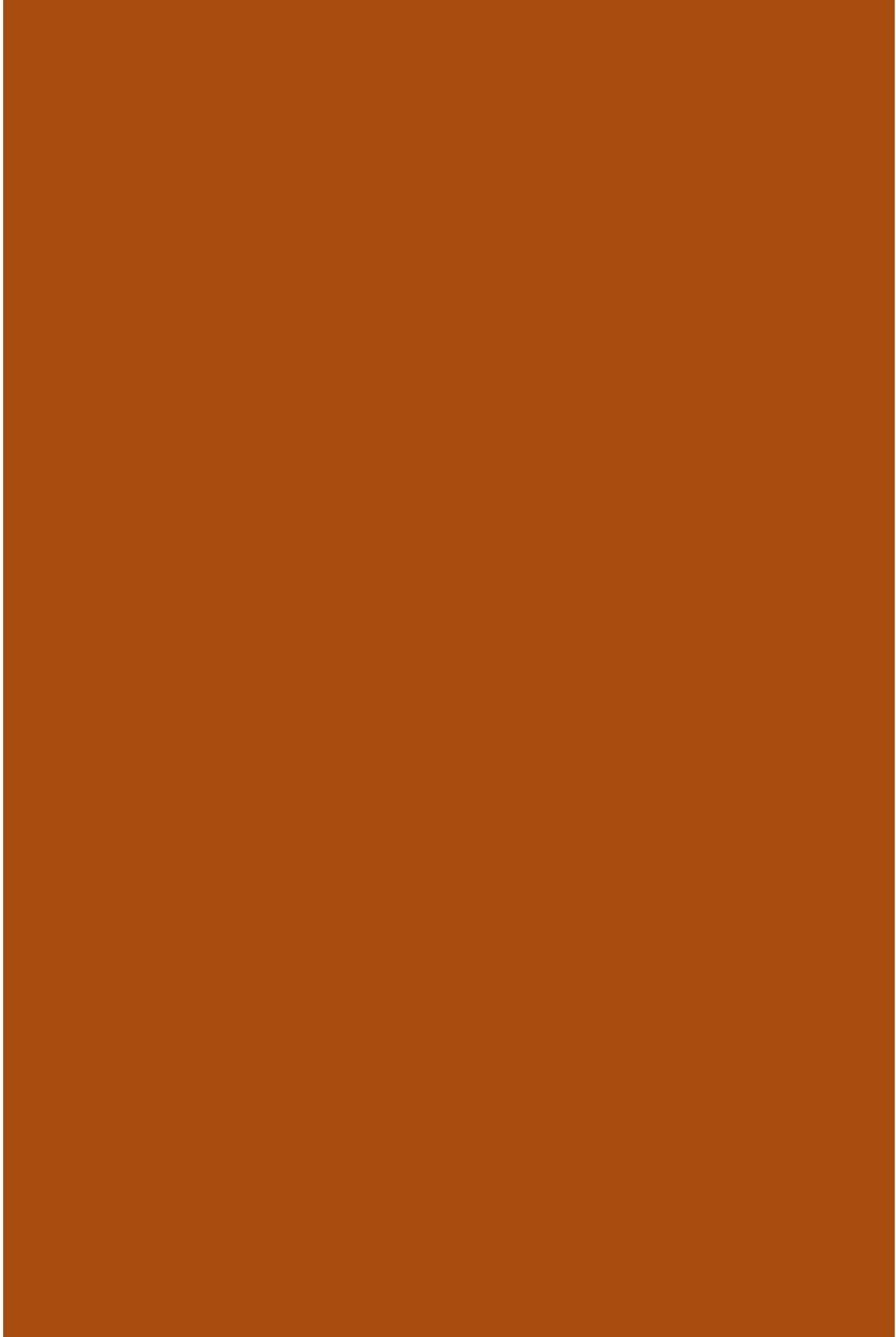
## VII. Conclusion/Summary

The value of and need for CON programs have diminished considerably over the years, and they no longer effectively serve their intended purposes of controlling costs and improving quality and access. In New York in particular, the CON program is unnecessarily complicated and expensive, dated, and over- and under-inclusive. As a result, GNYHA recommends that the State should, at the very least, exempt from review all construction, renovations, and acquisitions or movement of services and equipment. It should also assess which new providers, services, and equipment it believes still require CON review, developing revised need methodologies and criteria for those that remain subject to review.

Finally, New York must reduce the amount of time and effort currently involved in reviewing those projects that remain subject to review, whether as to need, design, or occupancy. This should be done through the most efficient processes reasonably possible, including wide use of provider certifications, architect/engineer certifications, or other mechanisms designed to speed the efficient and safe delivery of health care. In the end, the goal should be for the State and providers to concentrate their efforts on improving quality, safety, and access through the most effective and productive means.

# Citations

1. U.S. Department of Justice, Federal Trade Commission. “Improving Health Care: A Dose of Competition” (2004). Chapter 8, 1–4.
2. American Health Planning Association. “The Federal Trade Commission & Certificate of Need Regulation: An AHPA Critique” (January 2005): 3.
3. Conover, Christopher and Frank A. Sloan. “Does Removing Certificate of Need Regulations Lead to a Surge in Health Care Spending?” *Journal of Health Politics, Policy and Law* 23, no. 3 (June 1998): 455–481.
4. Shortell, Stephen M. and Edward F.X. Hughes. “The Effects of Regulation, Competition, and Ownership on Mortality Rates Among Hospital Inpatients.” *The New England Journal of Medicine*, 318, no.17 (April 28, 1988): 1100–1107.
5. Vaughn-Sarrazin, M.S., E.L. Hannan, C.J. Gormley, et al. “Mortality in Medicare Beneficiaries Following Coronary Artery Bypass Graft Surgery in States With and Without Certificate of Need Regulation.” *Journal of the American Medical Association*, 288, no. 15 (October 2002): 1859–1866.
6. Ho, V., M. Ku-Goto, and J.G. Jollis. “Certificate of Need for Cardiac Care: Controversy over Contributions of CON.” *HSR: Health Services Research*, 44, no. 2, Part I (April 2009): 483–500.
7. DiSesa, V.J., S.M. O’Brien, et al. “Contemporary Impact of State Certificate-of-Need Regulations for Cardiac Surgery.” *Circulation: Journal of the American Heart Association*, 114 (October 30, 2006): 2122–2129.
8. See note 1.
9. New York State Public Health Council. *Recommendations for Reform of the Establishment and CON Functions* (1996): 10.
10. *New York State Register* August 19, 1998: 8–10.







555 WEST 57TH STREET • 15TH FLOOR  
NEW YORK, NEW YORK  
P 212.246.7100. F 212.262.6350  
[WWW.GNYHA.ORG](http://WWW.GNYHA.ORG)



**Lenox** Health | *Greenwich  
Village*

FREESTANDING EMERGENCY  
DEPARTMENT

Review of First Year of Operations



**Freestanding Emergency Department  
Review of First Year of Operations**

**Table of Contents**

Program Overview ..... 2

Lenox Hill Hospital..... 3

Northwell Health..... 3

Administrative Structure..... 3

Benchmarking ..... 3

ED Volume..... 4

Pediatrics & Elderly ..... 5

Patient Acuity..... 6

Payor Mix ..... 7

Patient Acuity..... 8

Times..... 8

Left Without Completing Treatment ..... 9

Dispositions..... 9

Specialty Consultation ..... 10

Laboratory..... 10

Radiology..... 10

Sexual Assault Forensics ..... 11

ST-Segment Elevation MI ..... 11

Stroke..... 11

Training ..... 11

Quality..... 12

Patient Satisfaction ..... 12

Observation Medicine..... 12

SBIRT ..... 13

Community Outreach..... 13

Summary ..... 13

**Appendix A: Emergency Department Benchmarking Alliance Data ..... 134**

**Appendix B: Press-Ganey Survey Results ..... 138**

# Lenox Health Greenwich Village

## Freestanding Emergency Department

### Review of First Year of Operations

This report is being submitted to New York State Department of Health (DOH) in fulfillment of a requirement of the Public Health and Health Planning Council and DOH who approved Certificate of Need (CON) 111531 conditional on:

*“6. Submission of an annual report, acceptable to the Department, prepared by an independent outside entity to report on utilization and outcome data at the Lenox Hill Hospital Center for Comprehensive Care on the Lower West Side of Manhattan. The report shall be submitted on an annual basis beginning within three months of the first anniversary of commencement of operations and shall include the following:*

- *Emergency Department utilization data and comparative analysis of short- and long-term health outcomes for patients treated at Lenox Hill Hospital Center for Comprehensive Care versus other community hospital Emergency Departments.*
- *Emergency Department utilization data and comparative analysis of short-and long-term health outcomes for patients transferred from Lenox Hill Hospital Center for Comprehensive Care to other treating facilities versus the experience of other community hospital Emergency Departments (RNR)” as a condition of its Certificate of Need issued on November 1, 2011.*

#### Program Overview

On July 17, 2014 the Lenox Health Greenwich Village Emergency Department became the first operational Freestanding Emergency Department (“FED”) in Manhattan, the second in New York City, and the fifth in New York State. Although the concept of a fully functioning Emergency Department without an attached hospital is new for New York, FEDs have been operating in other States since the 1970s. Many of the first FEDs were in rural areas where access to emergency care was limited. Since then, FEDs have flourished with more than 400 currently operating in rural, suburban, and urban areas in 45 states.

Lenox Health Greenwich Village ED (“LHGV”) is open 24 hours a day, 7 days a week and is staffed with board certified Emergency Physicians, specially trained nurses, and experienced ancillary staff. Plain radiography, portable radiography, ultrasound, and CT scan capabilities are available at all times. An onsite lab performs over 60 different tests which account for the majority of studies commonly ordered in Emergency Medicine. Unlike many FEDs, the LHGV ED receives ambulances from the 911 system. Like all Emergency Departments in New York, LHGV treats all patients regardless of their ability to pay.

## Lenox Hill Hospital

The Emergency Department at Lenox Health Greenwich Village is a department of Lenox Hill Hospital, a 652-bed tertiary care hospital located on Manhattan's Upper East Side serving New Yorkers for over 150 years. Lenox Hill Hospital has a national reputation for outstanding and innovative patient care and proposed this facility to provide access to emergency and other essential health services to the neighborhoods affected by the bankruptcy and closure of St. Vincent's Medical Center.

## Northwell Health

Lenox Hill Hospital and the Lenox Health Greenwich Village are members of Northwell Health ("Northwell") (formerly known as the North Shore-LIJ Health System), a not-for-profit corporation that operates the largest Health system in New York State<sup>1</sup> comprised of 21 hospitals, 3 skilled nursing facilities, over 450 ambulatory physician practices, a medical school, and a research institute. Employing more than 61,000 people, Northwell is the largest private employer in the state of New York.

## Administrative Structure

All Emergency Departments in the health system are strategically aligned by the Emergency Medicine Service Line, a multi-disciplinary team of Emergency Medicine specialists dedicated to establishing best practices in all levels of unscheduled acute care. With almost 750,000 annual ED visits, the Service Line continually monitors the quality, financial health, research, and operations of all System Emergency Departments.

Lenox Health Greenwich Village has approximately 125 staff members which include an on-site Executive Director, Medical Director, Director of Patient Care Services, Administrative Director, 7 physicians, 7 physician assistants, 30 nurses, 10 radiology technicians, 13 lab technicians, 2 social workers/case managers, and a team of almost 50 ancillary and support staff.

## Benchmarking

Although some FEDs in other states have been operating for almost 50 years, very little published data exists against which a new FED's performance can be compared. For this reason, LHGV became a member of the Emergency Department Benchmarking Alliance<sup>2</sup> (EDBA); (Benchmarking Alliance), a not-for-profit organization that maintains an unbiased national database of demographic and performance data from over 800 Emergency Departments including 50 FEDs. The 50 FEDs are in 17 different states, are predominantly suburban, non-academic facilities and have annual volumes between 1,600 and 45,000 patient visits per year. A summary table of the benchmarking data can be found in Appendix A.

---

<sup>1</sup> Based on net patient revenue, Northwell Health is New York's largest Health System and the 14<sup>th</sup> largest in the country.

<sup>2</sup> <http://www.edbenchmarking.org/>

## ED Volume

In the 12 month period from July 17, 2014 to July 17, 2015 LHGV Emergency Department saw 28,912 patients at an average of 79 patients per day (range: 30-116 patients/day). From March through July a significant increase in patient volume occurred, with July having an average of 95 patients per day. (Figure 1). This has been attributed to increased community and EMS comfort with the freestanding model. At this volume, LHGV is the 11<sup>th</sup> busiest FED in the Benchmarking Alliance.

The Certificate of Need had projected the first year visits would be 27,802 patients. The actual first year visits has been 28,912 patients, a difference of 4% from projected.

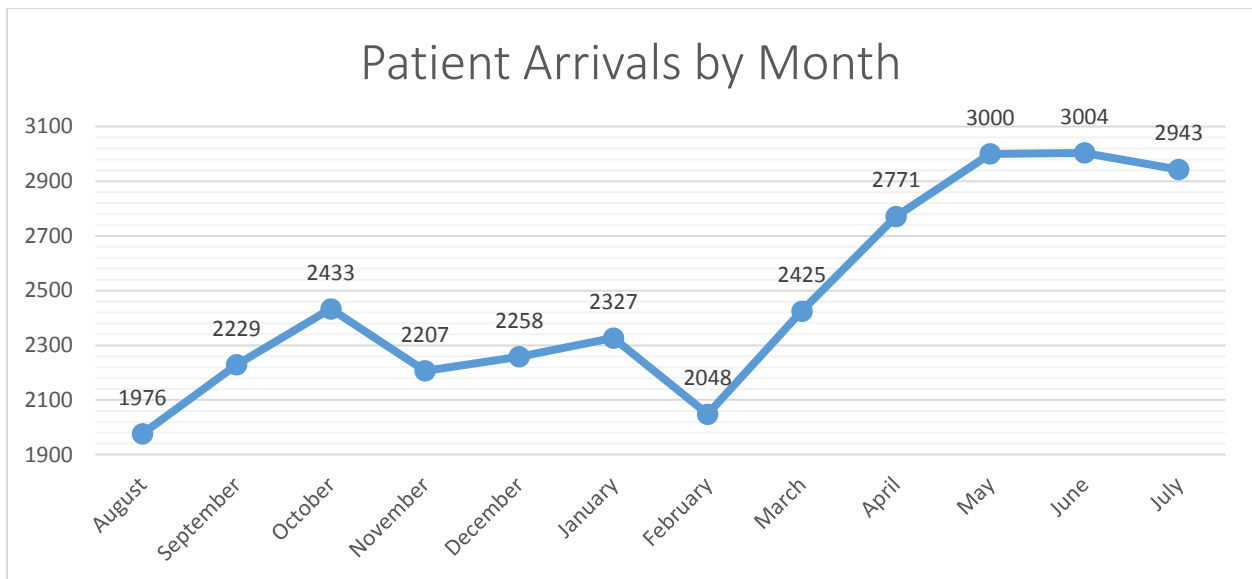


Figure 1 (Data shown represents volume between August 1, 2014 and July 31, 2015)

The Lenox Health Greenwich Village Emergency Department receives ambulances from the New York City 911 system as well as several private ambulance services. While the department is on permanent diversion for certain specific patient types<sup>3</sup>, approximately 50% of all patient arrivals are via EMS. (Figure 2). Only 63% of the ED/BA FEDs receive ambulances. Of those that do, the average percentage of patient arrivals by EMS is 6% (range: 0%-17%)

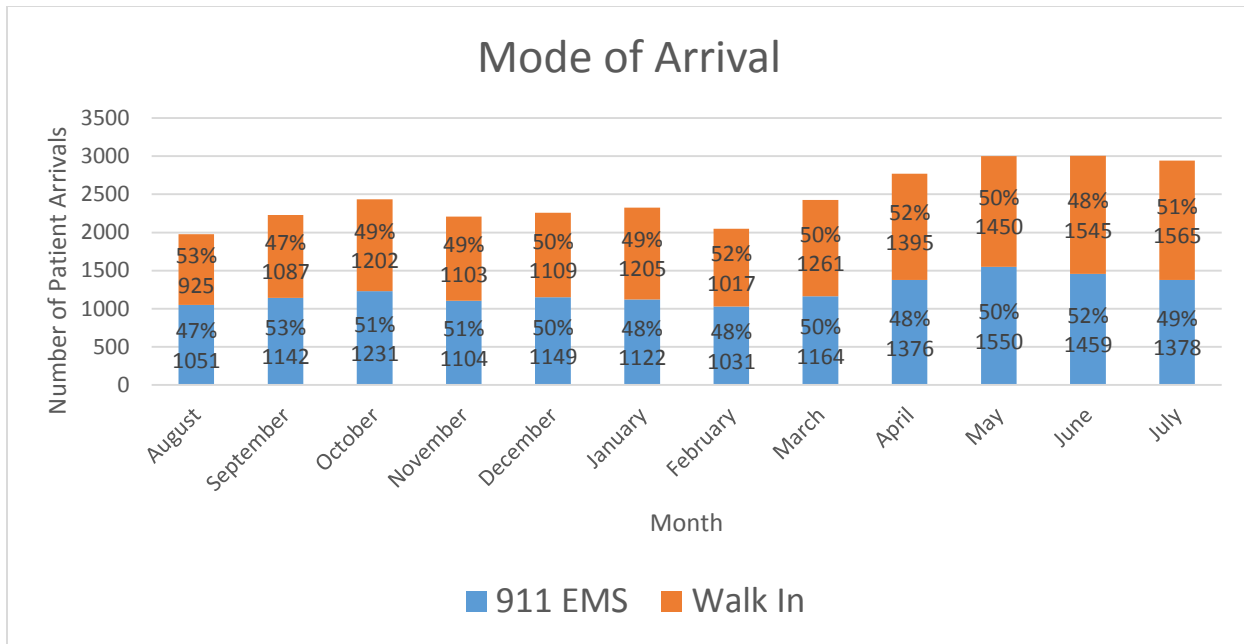


Figure 2

## Pediatrics & Elderly

Approximately 5% of the patients treated at LHGV are under the age of 18. This is significantly lower than the ED/BA's average of 25% (range: 11%-35%). Only 165 LHGV patients (0.6% of all visits) were less than 2 years of age. Approximately 13% of patients were over the age of 65 at the time of their visit, and 248 (0.9% of all visits) were over 90 years of age.

<sup>3</sup> Permanent diversion applies to pre-hospital suspicion of ST-segment elevation myocardial infarction, stroke, acute psychiatric emergencies, trauma, severe burns, and obstetrical emergencies

## Patient Origin

The patients that arrived at LHGV ED during the first year of operations has not changed dramatically from those that sought care at the former St. Vincent's Medical Center in the last year of its operation. The service area represents 38% patient visits, the rest of Manhattan 17%, and Brooklyn 12%. The largest percentage difference is from those patients outside of the five boroughs of NYC, 14% LHGV vs. 9% SVMC. The CON had anticipated far fewer patients coming from outside the service area, 75% service area vs. 25% outside the service area. (Figure 3) This indicates the acceptance of the ED by the community and FDNY and other EMS providers.

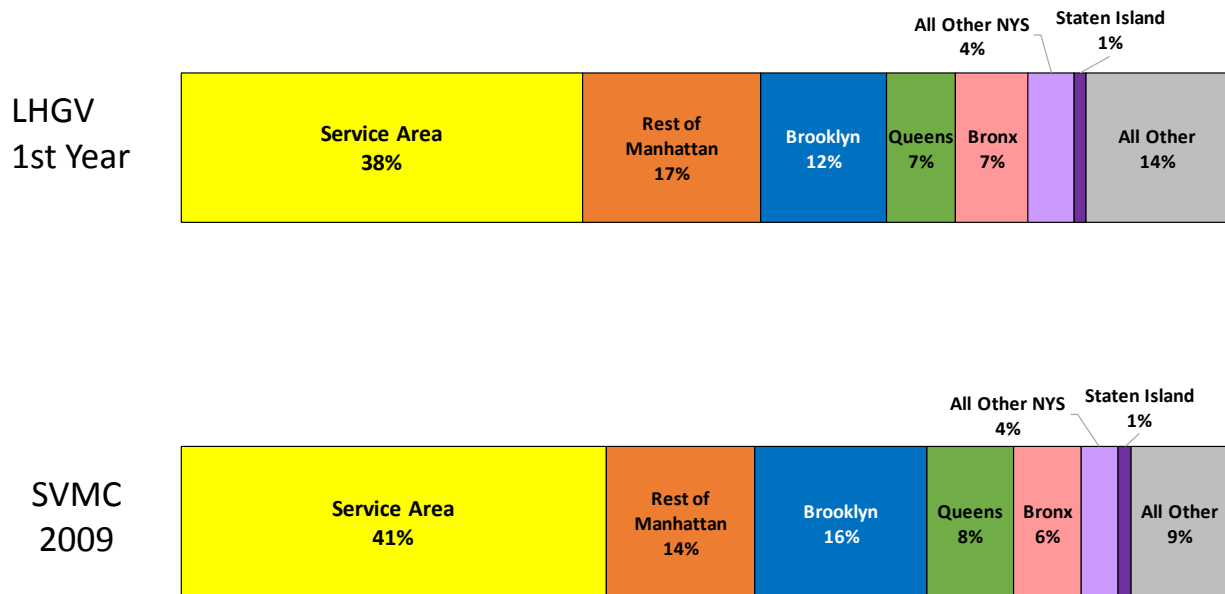


Figure 3



## Payor Mix

In the first year of operations, LHGV payor mix was 34% Commercial, 30% Medicaid, 22% Self-Pay/Other and 14% Medicare. This compares favorably with the CON Year 1 projection (Figure 4).

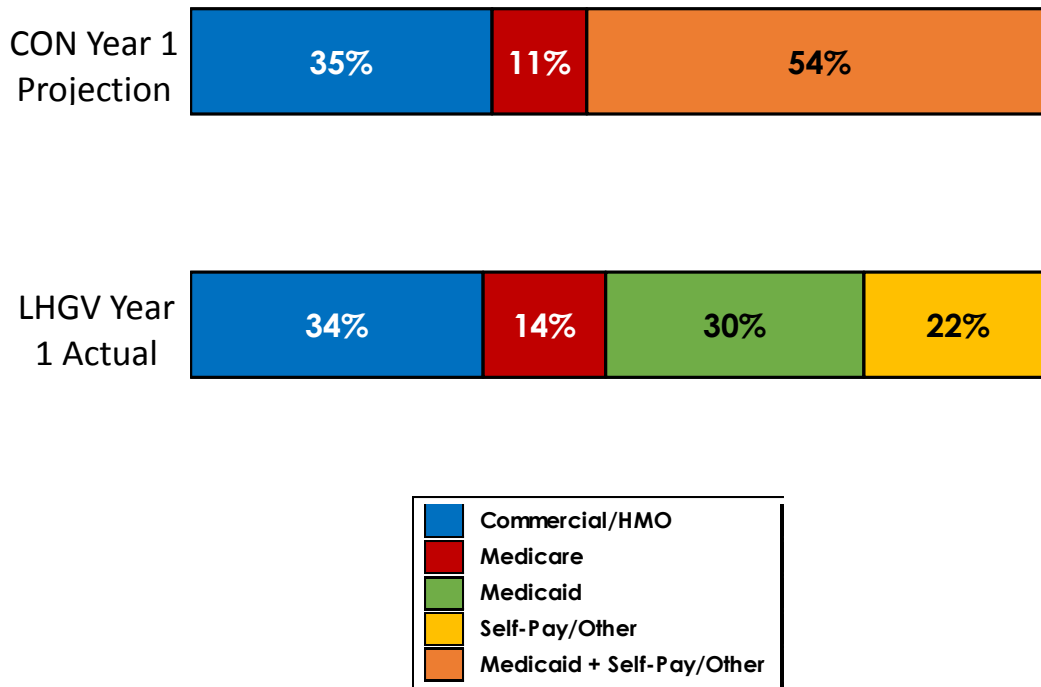


Figure 4

## Patient Acuity

A validated, objective scale called the Emergency Severity Index (ESI) is used to gauge how ill a patient appears and how many resources they are likely to require during their stay in the Emergency Department. The scale is 1 to 5 with 1 being most acute and 5 the least acute. At LHGV, 0.3% of patients were ESI 1, 25% were ESI 2, 36% are ESI 3, and 32% are ESI 4, and 6% were ESI 5. The overall average ESI for all patients is 3.01. (Figure 5) This is comparable to the acuity of patients seen at Lenox Hill's Emergency Department.<sup>4</sup>

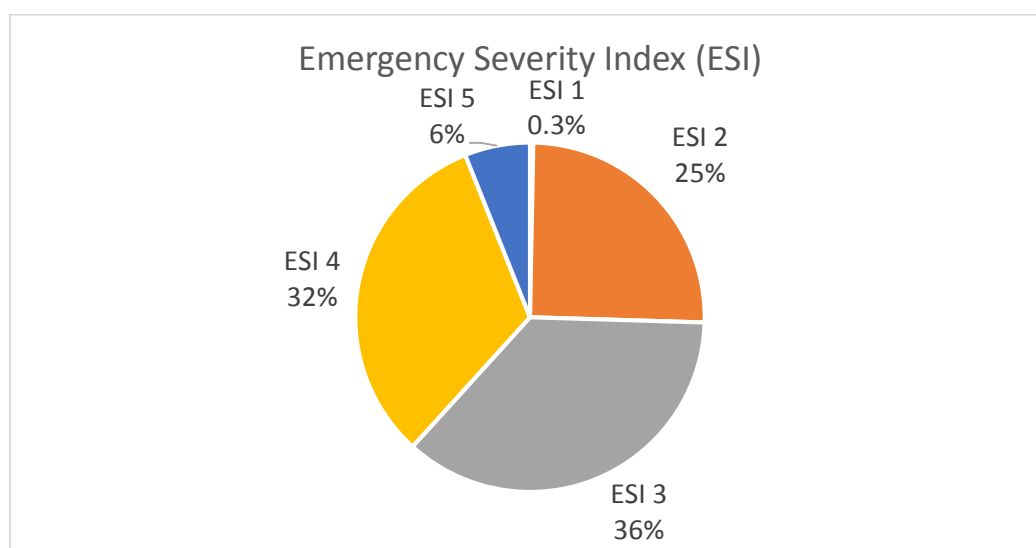


Figure 5

## Times

The LHGV Emergency Department uses a “quick look” direct to bed triage method where all patients are greeted immediately upon arrival by a nurse and are placed directly into a treatment space. Because of this system, the mean door to treatment space time at LHGV is 4 minutes, considerably faster than the EDBA's 11 minutes (range: 2-34 minutes).

Door to provider times at LHGV average 21 minutes which is in line with the EDBA's average of 22 minutes. According to a ProPublica report summarizing CMS data from 2014<sup>5</sup>, the average time to see a provider was 24 minutes nationally and 33 minutes in New York. The same ProPublica study revealed that LHGV's two closest neighbors, Beth Israel Medical Center and Bellevue Hospital Center had average door to provider times of 59 and 58 minutes, respectively.

The length of stay for treat and release and admitted patients averaged 197 and 425 minutes respectively. (Table 1) The difference between LHGV and EDBA may be partially explained by the fact that none of the EDBA FED facilities are in New York State. Average treat and release

<sup>4</sup> ESI distribution for Lenox Hill Emergency Department: 0.3% ESI 1, 26% ESI 2, 44% ESI 3, 23% ESI 4, 1% ESI 5.

<sup>5</sup> ProPublica, CMS Data dated December 17, 2014: <http://projects.propublica.org/emergency/state/NY>

length of stay in New York is 158 minutes with 22 facilities exceeding 200 minutes<sup>6</sup>. Also, only one of the EDDBA facilities is located in an urban location. Additionally, LHGV's location in Greenwich Village makes it the closest Emergency Department to the numerous nightclubs, restaurants, and bars in lower Manhattan. It is not unusual for almost 25% of the patients seen at LHGV in a week to have the chief complaint of alcohol intoxication, overdose, or injury secondary to intoxication. These patients frequently require high resource allocation and have long lengths of stay.

	LHGV	EDBA	EDBA Range
<i>Door to Bed</i>	4 minutes	11 minutes	2 min – 34 min
<i>Door to Provider</i>	21 minutes	22 minutes	5 min – 47 min
<i>Treat &amp; Release LOS</i>	197 minutes	103 minutes	58 min – 154 min
<i>Admitted LOS</i>	425 minutes	252 minutes	114 min – 382 min

Table 1

## Left Without Completing Treatment

An important indicator of a successful patient assessment and treatment process is a department's Left Without Completing Treatment (LWCT) rate. During LHGV's first year of operation, 410 patients (1.4% of arrivals) left prior to completion of their treatment. This is comparable to the EDDBA's average LWCT rate of 1.1% (range: 0.1% - 4.3%). Of these 410 patients, 174 eloped after treatment had begun and 236 left prior to being seen by a provider.

## Dispositions

Of the 28,912 patients seen in the first year of operations, 2,052 (7.1%) required hospitalization. This correlates well with other FEDs in the Benchmarking Alliance which have an average hospitalization rate of 7% (range: 1.8% - 14%). The CON had projected that 6% of the patients would require hospitalization. Because of the unique characteristics of FEDs, patients are usually given their choice of destination facility should hospitalization be required. All transfers were performed using Northwell's advance life support ambulances which are stationed on-site at all times. In 96% of cases, patients were transported directly to inpatient beds without waiting in the destination facility's Emergency Department.

Of all patients admitted to the hospital from LHGV, approximately 20% are admitted to an ICU, 22% to a step down or telemetry unit, and the remainder to floor beds. The ICU admission rate is somewhat higher at LHGV compared with Lenox Hill's Emergency Department (20% vs. 5%). This may be due, in part, to the large number of patients seen at LHGV with intoxication related issues/injuries. In the first year, 416 LHGV patients required advanced critical care, 63 required advanced airway management, and 26 required advanced vascular access.

---

<sup>6</sup> Ibid.

In a very small number of cases, a patient may suffer from a condition so time sensitive that despite all possible Emergency Department treatment their condition rapidly deteriorates and immediate surgery or other invasive intervention is needed. To ensure that LHGV was prepared for these patients, arrangements were made with Beth Israel Medical Center for the immediate transportation of these “hypercritical” patients, after stabilization, directly from LHGV to their Emergency Department. In the first year, this “hypercritical” transfer process was used 25 times (0.08% of patients). The majority of these patients’ conditions were due to STEMI, cardiac arrest, trauma or severe sepsis. In all cases the patient was stabilized at LHGV and immediately transferred. There were no unexpected adverse outcomes.<sup>7</sup>

## Specialty Consultation

Since FEDs are geographically separate from hospitals, some questioned if access to specialty consultation may be delayed or limited since the consultants are not physically nearby. This has not been the experience at LHGV. An attending cardiologist is available to see patients at all times to facilitate immediate cardiac care. Other specialists also routinely care for patients on site at all hours. Access to all major specialties and subspecialties has been provided by the staff at Lenox Hill Hospital, either in person, via telemedicine, or during an otherwise necessary admission. Every exam and treatment room at LHGV has the equipment necessary to conduct telemedicine consultations including some with specialty HD cameras, skin cameras, and retinal cameras. As of July 31<sup>st</sup>, only 54 patients (0.1%) required evaluation by a specialist not immediately available at LHGV. In these cases, the patients were transported to Lenox Hill Hospital’s ED and seen immediately by the specialists there.

## Laboratory

The 24 hour on-site laboratory at LHGV is one of the largest and most test comprehensive licensed labs serving a freestanding ED in the country. Sixty-eight tests are performed on site with an average turn-around time of 22 minutes. As of July 2015, the laboratory had run 72,655 tests, averaging 2.5 tests per patient. The lab scored 100% on New York State proficiency testing and had zero deficiencies during state inspections.

## Radiology

Standard and portable x-ray, ultrasound, and high-resolution low-dose CT scanning are currently available at LHGV 24 hours a day. An on-site radiologist reads films and consults with providers during scheduled hours. After hours, images are read by radiologists at Lenox Hill Hospital via tele-radiology. In all, 12,080 x-rays, 7,236 CT scans, and 1,230 ultrasounds were performed as of July 31, 2015. This equates to 42 x-rays per 100 patients (EDBA average: 36) and 25 CT scans per 100 patients (EDBA average: 13). Utilization review efforts are currently underway to determine the possible causes for the LHGV’s relatively high CT use. Preliminary

---

<sup>7</sup> Detailed QA data on these “hypercritical” cases is available upon DOH request.

findings suggest that almost half of the CTs performed were of the brain, and many were due to falls secondary intoxication or overdose.

## Sexual Assault Forensics

Lenox Health Greenwich Village is a New York State designated Center of Excellence for the care of sexual assault survivors. During the 12-week training held prior to opening, the entire clinical staff completed the 40 hour Department of Health forensic examination course. Since opening, this critical service has been provided to approximately 50 survivors.

## ST-Segment Elevation MI

Although the LHGV Emergency Department is on permanent EMS diversion for ST-segment elevation myocardial infarctions (heart attacks), people suffering from this condition still are able to arrive as a walk-in. In the first year of operation only 5 such patients presented. In each case the patient was immediately evaluated, stabilized and rapidly transported directly to the cardiac catheterization lab at Beth Israel Medical Center (BIMC). Time from first presentation to when the coronary artery is opened with a balloon should be under 90 minutes for best outcomes. In all five cases the patients were transferred within the 90 minute window from arrival at LHGV to having their arteries opened at BIMC. Monthly quality review conferences are held between LHGV and BIMC to review prior cases and to promote continual process improvement.

## Stroke

Another time sensitive diagnosis is stroke. If a clot-busting medication, tPA, can be administered within a few hours of the onset of stroke symptoms, a patient's chance of improvement can be increased. Although LHGV is on permanent diversion for stroke cases via EMS, 14 such patients have presented, 4 of which were within the time window to receive tPA. All four patients had significant improvement in their conditions with two having complete resolution of all of their deficits.

## Training

To enhance teamwork and to help build a culture of trust and safety, the entire LHGV clinical team started training together 12 weeks prior to LHGV opening. Using the resources of Northwell's nationally acclaimed corporate university and clinical learning center, the Center for Learning and Innovation, the staff underwent personality assessments and took classes on teamwork, de-escalation, intensive training on cultural and LGBT sensitivity, and crisis management. Advanced procedures were practiced by multi-disciplinary teams in cadaver lab. Mechanical and live actor simulations were used to run the team through a wide variety of patient care scenarios. The entire staff completed FEMA's Hospital Emergency Response Training (HERT) which concluded with a full scale disaster & decontamination drill performed in conjunction with NY Presbyterian.

## Quality

The LHGV Emergency Department has a robust integrated quality assurance and improvement program with Lenox Hill Hospital. A combination of cases referred from any source and a random selection of high acuity cases are reviewed weekly by a multi-disciplinary team. The cases are scored using a standardized instrument designed to help reveal the root cause of issues. All quality metrics are logged in a database and tracked for trends. When necessary, individual and team performance improvement counseling is performed although whenever possible improvement is also made in policy and procedure to decrease the likelihood of future issues. Quality matters at LHGV are reported to the Lenox Hill Hospital quality department, report-outs are performed at the Lenox Hill Hospital Performance Improvement Coordinating Group (PICG) and if necessary issues can be brought to the Lenox Hill Medical Board.

As an additional way to monitor for quality, all cases of admission or transfer are reviewed by the LHGV Medical Director. For patients admitted to Lenox Hill Hospital, review of the inpatient medical record is performed to ensure that the patient did not have any unexpected changes in condition and to assess for final patient outcome and disposition. Monthly quality assurance case review meetings occur between LHGV administrative staff and representatives from each of the Lenox Hill departments that receive LHGV patients. These meetings permit open discussion regarding quality improvement opportunities.

To foster continued close collaboration with Beth Israel Medical Center (which receives 20% of LHGV patients who require hospital admission) a monthly quality conference is held between LHGV providers and staff, and the medical director and chief hospitalist from BIMC. When needed, representatives from other services also attend the meeting.

## Patient Satisfaction

Lenox Health Greenwich Village sends Press Ganey customer satisfaction surveys to a randomly selected subset of its patients. As of July 17, 2015, approximately 850 patients had responded (10% response rate). Approximately 92% of all responding LHGV patients would “definitely recommend” the facility to family or friends. This score places LHGV in the 94<sup>th</sup> percentile of all Emergency Departments nationwide and the 99<sup>th</sup> percentile of Emergency Departments in New York State. Similar scores were observed in questions regarding pain control, privacy, and communication issues. The full results of the survey has been included in Appendix B.

## Observation Medicine

In the first quarter of 2015, LHGV launched an observation services program aimed at reducing admissions and increasing the intensity of services available to local residents. The program focuses on patients with conditions that can often be treated and result in a discharge within 24 hours such as chest pain, syncope, congestive heart failure, atrial fibrillation, cellulitis, asthma, COPD, dehydration, and altered mental status/overdose. Caring for these patients at LHGV rather than admitting them to a hospital improves patient satisfaction, reduces hospital-

associated morbidity such as hospital-acquired infections, and allow patients to return to their normal lives sooner. As of July 2015, 279 patients received observation services at LHGV, resulting in 230 avoided hospital admissions.

## SBIRT

The Emergency Department at the LHGV is proud to be participating in a federal grant program to bring alcohol and substance abuse screening to the bedside of every ED patient. The SBIRT program provides professional Screening, Brief Interventions, and Referrals to Treatment for at-risk substance users, regardless of the reason for their Emergency Department visit. The program has seen great success with 5,264 brief screenings, 900 in-depth screenings, 356 brief interventions, and 159 referrals to treatment between opening and July 31, 2015.

## Community Outreach

The team at LHGV is also focused on providing benefit to the community that goes beyond emergency care. In 2015, LHGV staff provided health education at 14 community meetings, gave 20 free community CPR courses, held 16 free flu shot sessions, and participated in 3 health fairs. LHGV staff provided free mobile medical care to the participants in the AIDS bike ride from Boston to New York City. LHGV also produces a monthly health awareness newsletter distributed to over 8,000 community residents.

## Summary

In the first year, LHGV finished just outside of the top 10 busiest FEDs in the national benchmarking alliance, a significant milestone in its inaugural year. LHGV saw approximately 79 patients per day with all levels of acuity. As awareness and confidence among the community in the new FED grows, we anticipate those numbers to rise. Outcomes, quality, and patient satisfaction are all excellent. With continual improvement as the primary goal, LHGV looks forward to continuing to serve its community for many, many years to come. Despite initial community apprehension, the facility has been embraced by its community, exceeding projections in CON by 4%, and attaining 99% Press Ganey score. With almost 3,000 patient arrivals monthly, the second year of operation we project almost 36,000 annual patient visits, greatly exceeding expectations.

## Appendix A

### Emergency Department Benchmarking Alliance 2013 Summary Data

#### Freestanding Emergency Departments

LHGV Data has been included and highlighted.





## About Us

The Emergency Department Benchmarking Alliance (EDBA) is a not-for-profit organization which exists solely to support the people who manage emergency departments across the country.

We do this in multiple ways:

- By maintaining an independent, unbiased database of demographic and performance metrics. This database contains some of the cleanest information in the business. It is created by the membership, for the use of the membership, and has no commercial interest attached to it. As of January, 2015, we have **over 1,000 hospitals** represented in our database.
- By fostering community, sharing, support, and mutual advice for people with operational responsibilities in emergency services.
- By co-sponsoring regular educational events relating to ED management.
- By sponsoring consensus conferences, which bring together authoritative people from, and relating to our field, in order to set national standards and influence national practice.
- By providing a framework and support for research relating to ED operations.

By pursuing these goals, we also support another important goal: The identification, development, and implementation of future best practices in Emergency Medicine.

EDBA was founded in the early 1990's by Emergency Department leaders representing large ED's in the mid-west seeking solutions to local service issues. Over the years it has expanded in scope, mission, and geography. The database now includes hospitals of all sizes from all over the country, and our educational, research, and consensus-building activities have national implications. EDBA welcomes all disciplines of Emergency Department leaders, including physicians, nurses, and management. The current President is Dr. Charles L. Reese, IV, MD from Christiana Care Health Services.

Effectively managing an ED, especially in this time of tremendous service pressure and rapid change, is one of the most challenging jobs in health care today. ED managers across the country tend to share similar problems and interests, and in essence speak a common language which is not understood well by those outside the specialty. One of the best parts of EDBA membership is being connected to others within this world, and being connected with new skill sets and concepts which can help address these specific issues.

There could not be a better time to focus energy on the Emergency Department, at a time when so many citizens are relying on a site of excellent unscheduled health care.





## Appendix B

### Press-Ganey Survey Results

Lenox Health Greenwich Village

For visits dated

July 17, 2014 – July 17, 2015

## HEALTH CARE REGULATORY MODERNIZATION INITIATIVE

### Background Paper: Integrated Primary Care and Behavioral Health

#### Policy Topic: Integrating Primary Care and Behavioral Health

#### Problem Statement:

There are currently three separate sets of licenses, regulations, billing methodologies, and oversight processes for primary care, mental health, and substance use disorder services causing a burdensome, confusing and inflexible maze through which providers must navigate in order to offer integrated services. Entities desiring to integrate services must either deal with varying thresholds levels, multiple Certificate of Need applications from the separate agencies, separate billing codes, different billing rules and must adhere to multiple license requirements. While NYS allows for some sharing of space and coordinated survey processes, these separate license categories, separate billing methodologies, and separate state oversight mechanisms present an unnecessary barrier to coordinated care.

Some providers, including FQHCs, physician practices, Article 31 clinics and Article 32 clinics have been engaged in innovative approaches to deliver integrated primary care and behavioral health care. Implementing new models of integrated care will require continued flexibility and coordination among relevant State agencies and modernization of the regulatory, oversight, and billing structures that support them.

The Delivery System Reimbursement Incentive Program (DSRIP) included a project 3.a.i that each Performing Provider System (PPS) chose for behavioral health and primary care integration. Implementation of this project highlighted the challenges of navigating rules and regulations and the establishment processes which must be followed have not allowed for a flexible, rapid and cost effective transformation as desired.

#### Background:

Regulatory modernization will require an examination of various statutes and regulations to include, but not limited to:

- Department of Health (DOH)
  - [Public Health Law \(PHL\) Article 28;](#)
  - [Part 404, Title 10 New York Codes Rules and Regulations \(NYCRR\);](#)
  - [Part 600, Title 10 NYCRR;](#)
  - [Part 710, Title 10 NYCRR;](#)
- Office of Mental Health (OMH)
  - [Mental Health Law \(MHL\) Article 31;](#)
  - [Part 551, Title 14 NYCRR;](#)
  - [Part 598, Title 14 NYCRR;](#)

- [Part 599, Title 14 NYCRR](#);
- Office of Alcoholism and Substance Abuse Services (OASAS)
  - [MHL Article 32](#);
  - [Part 810, Title 14 NYCRR](#);
  - Part 822, Title 14 NYCRR; and
  - [Part 825, Title 14 NYCRR](#).

### **Steps Taken:**

The following gives an in-depth view of the rules and regulations that support primary and behavioral health integration models and approaches in New York State.

### **Integrated Primary and Behavioral Health Licensing or Certification Thresholds**

DOH, OMH and OASAS license or certify providers to provide health and behavioral health care services in New York State. A provider may integrate primary care and behavioral health services by applying for a license or certificate from the agency (DOH, OMH or OASAS) that licenses or certifies the additional services.

In 2008, the State developed licensure thresholds allowing a single provider licensed or certified by DOH or OMH to offer services otherwise licensed or certified by the other agency, without needing to submit a second application. A clinic site licensed by DOH must be licensed by OMH if more than 10,000 or 30 percent of its annual visits are for mental health services. A clinic site licensed by OMH or certified by OASAS must be licensed by DOH if more than 5 percent of its visits are for medical services or any visits are for dental services. Licensure thresholds are not applicable for OASAS services.

### **Integrated Outpatient Services (IOS) Regulations**

The 2012-13 State budget enacted legislation authorizing OMH, OASAS and DOH to further facilitate the delivery of integrated and coordinated primary care and behavioral health services. The intent was to reduce the administrative burden on providers by streamlining the approval and oversight process, and to improve the quality of care provided to people with multiple needs by improving overall coordination and accessibility of care. The project identified seven pilot providers with licenses from at least two of the three participating state agencies (OMH, OASAS and DOH) and ultimately, in total, resulted in the approval of 15 integrated clinic sites.

To accomplish this, an interagency workgroup developed a single set of administrative standards and a single application and survey process under which providers operate and are monitored. While allowing for an “integrated record,” the

workgroup allowed providers to develop their own records (subject to applicable law and regulation). To incentivize participation, pilot participants were provided with a five percent Medicaid rate increase for integrated services. Pilot providers were overseen by a single State agency (the "host" agency) and were subject to survey by an interagency team rather than by multiple agencies. The project gave substantial support to the idea that integrated licensure is the lynchpin to all other integrated care initiatives.

Based on the success of the integrated licensure project, DOH, OMH and OASAS enacted the IOS Regulations effective January 1, 2015. A provider licensed or certified by more than one agency may add services at one of its sites (the "host" site) without additional license or certification, if it is licensed or certified to provide such services at another site:

- Primary Care Host Model (DOH licensed providers adding mental health and/or SUD services)
- Mental Health Behavioral Care Host Model (OMH licensed providers adding primary care and/or SUD services)
- Substance Use Disorder Behavioral Care Host Model (OASAS certified providers adding primary care and/or substance use disorder services)

A clinic site licensed by DOH seeking to add behavioral health services must submit an application through the DOH Certificate of Need electronic application process. A clinic site licensed by OMH or certified by OASAS seeking to add primary care or behavioral health services must submit the application available on the OMH and OASAS websites, respectively.

In addition to the requirements of the state agency that licensed or certified the proposed host site, IOS providers must meet operating and physical plant standards set forth in the IOS regulations.

IOS regulations can be found in [Part 404](#) of Title 10 NYCRR, and in [Parts 598](#) and [825](#) of Title 14 NYCRR.

### **DSRIP Project 3.a.i Licensure Threshold**

The objective of DSRIP Project 3.a.i is to promote the integration of primary and behavioral care to ensure coordination of care. The DSRIP Project 3.a.i Licensure Threshold allows a provider participating in Project 3.a.i to integrate primary care and behavioral health services under a single license or certification if the service to be added is not more than 49 percent of the provider's total annual visits. A provider must be identified by the PPS Lead and submit an application. The provider must

follow the programmatic requirements of its licensing agency and meet specific components of the IOS Regulations, as outlined in guidance.

### **Co-Location and Shared Space**

Co-location means that two or more providers are at the same location but do not share physical space, such as a building with a shared entrance, atrium or elevator. Unless otherwise prohibited, when providers are co-located, public space within the building may be accessible to patients of all providers (e.g., a building may have shared entrances and exits, atria, elevators and staircases). Corridors or hallways that lead to separate providers may be available to all co-located providers as long as an individual does not need to travel through the clinical space of one provider to get to another provider.

There are a number of issues surrounding co-location and shared space including how providers will share accountability for meeting regulatory standards, how patients will be made aware that they are being seen by different providers and the applicability of federal regulations. DOH has worked with OMH and OASAS to address barriers that might stand in the way of appropriate arrangements and has engaged in discussions with the federal Centers for Medicare and Medicaid Services (CMS) to obtain clarification and expansion of CMS policies and procedures.

The three agencies worked together on a guidance document to assist providers in understanding what arrangements could be pursued. Guidance issued in 2016, available at [http://www.health.ny.gov/health\\_care/medicaid/redesign/dsrp/2016/docs/2016-09-14\\_shared\\_space\\_guide.pdf](http://www.health.ny.gov/health_care/medicaid/redesign/dsrp/2016/docs/2016-09-14_shared_space_guide.pdf), sets forth the options for each provider type with respect to co-location and shared space. An application process for various types of shared space arrangements between two or more providers was implemented and generally has been well received by providers.

However, the guidance also notes that limitations on the sharing of space exist in certain cases involving federally designated facilities such as general hospitals, rural health clinics and federally qualified health centers (FQHCs). The state agencies are continuing to work with CMS to see if there are additional opportunities to pursue flexibility for providers.

### **Collaborative Care Medicaid Program**

OMH continues to grow the New York State Collaborative Care Medicaid Program, which provides training and technical assistance to support the implementation of evidence-based, integrated care in primary care practices. Sometimes called IMPACT, this collaborative care model is the most empirically supported model of behavioral health integration that seeks to treat commonly occurring mental health



conditions, such as depression and anxiety, in the primary care setting. Over 80 randomized controlled studies have shown Collaborative Care to be more effective than “usual” care, and studies show that Collaborative Care improves not only mental health, but has also demonstrated improvements in chronic disease for Collaborative Care patients. The program sustains its integrated infrastructure via an innovative Medicaid reimbursement methodology that provides a value-based, monthly, case rate payment.

**Possible Solutions for the Workgroup to Explore:**

This workgroup will explore regulatory/statutory options where appropriate to establish New York State Regulatory changes and flexibility that would allow primary care, mental health and substance use disorder services to be provided under a single license, through a single application process, supported by a single set of rate codes in an integrated setting without duplicative oversight from multiple agencies. This consolidation and flexibility will also expedite the processes and ultimately provide patients access to better and more cost-effective care.



## HEALTH CARE REGULATORY MODERNIZATION INITIATIVE

### Background Paper: Post-Acute Care Management Models

Problem Statement: Fundamental changes in the organization of healthcare are occurring rapidly across the US in general, and NY in particular. NY is a leader in healthcare innovation as evidenced by the extensive participation of our state's healthcare providers in new care delivery models organized by CMS, DOH, private insurance carriers and others targeting increased quality of care and reduced costs, while improving access. Innovation, however, is often accompanied by challenges as new delivery systems encounter laws and regulations passed in a healthcare environment that does not necessarily take account of the altered paradigm. It is therefore appropriate to consider the interaction of the existing healthcare framework on new care delivery methodologies and highlight opportunities for change where amendments support high-quality healthcare delivery in patient-centered models.

Current NY regulations sometimes conflict with emerging care management models for post-acute care services when patient-provider interactions outside of PHL Article 28 facilities seem to trigger PHL Article 36 provisions. Article 36 requires licensure for home care services agencies that provide "nursing services, home health aide services, or personal care services" (see NY PHL §3605(1)). Some new care management programs, whether organized around CMS Center for Medicare and Medicaid Innovation (CMMI) models, Delivery System Reform Incentive Payment (DSRIP) models or other programs (public and private), incorporate care for patients at home as part of their service delivery and desire authority to provide care to patients in the home by appropriately licensed or certified individuals (including nurses, social workers, home health aides and personal care aides).

Within the post-acute care setting, it is likely that there are instances when alternative care models are and are not appropriate. This workshop will explore this question by examining how to maintain high quality healthcare and patient safety for healthcare consumers, while also responding to emerging evidence of the effectiveness of alternative care management models.

To date, stakeholders within the home care services industry and healthcare providers developing alternative care management models have shared some preliminary concerns that arise about this issue from their perspective. The NYS DOH has not issued guidance or recommended regulatory or statutory change to date.

Background: The two primary NY statutory provisions at issue in this workshop include Public Health Law Articles 36 and 28. Article 36 governs licensure for home care services agencies and Article 28 governs licensure for hospitals. The workgroup will explore whether, and what types of, home-based services constitute home care and trigger Article 36 licensure provisions. The workgroup will also consider what types of home-based services are allowable under Article 28 for "hospital services" and the "hospital-home care-physician collaboration program." Furthermore, the workgroup welcomes discussion about post-acute care models outside of Articles 36 and 28 to the extent that they are under consideration in various forms and stages of development.

Specifically:

- PHL Article 36 governs licensure and oversight of home care services agencies including Certified Home Health Agencies (CHHA's) and Licensed Home Care Service Agencies (LHCSA's). Sections relevant to this workshop include:
  - PHL §3602(1) which defines "home care services" to mean "one or more of the following services provided to persons at home: (a) those services provided by a home care services agency; (b) home health aide services; (c) personal care services; (d) homemaker services; (e) housekeeper or chore services."
  - PHL §3602(2) which defines "home care service agency" to mean "an organization primarily engaged in arranging and/or providing directly or through contract arrangement one or more of the following: Nursing services, home health aide services, and other therapeutic and related services which may include, but shall not be limited to, physical, speech and occupational therapy, nutritional services, medical social services, personal care services, homemaker services, and housekeeper or chore services, which may be of a preventive, therapeutic, rehabilitative, health guidance, and/or supportive nature to persons at home."
  - PHL §3605 which governs licensure of home care services agencies and states "[a]fter April first, nineteen hundred eighty-six, no home care services agency which is engaged in providing, directly or through contract arrangement, nursing services, home health aide services, or personal care services shall be operated without a license issued by the commissioner in accordance with the standards set forth in this section; provided however, an agency which provides personal care or home care services exclusively to individuals pursuant to a program administered, operated or regulated by another state agency or an organization licensed and operating exclusively as a nurses' registry pursuant to article eleven of the general business law shall be exempt from the licensure requirements of this chapter. The licensure requirements of this chapter shall not apply to sole practitioners licensed pursuant to sections six thousand nine hundred five and six thousand nine hundred six of the education law."
  - PHL §3608 which governs the certification of home care services agencies and states "[t]he commissioner shall issue a certificate of approval to any home care services agency qualified to participate as a home health agency under titles XVIII and XIX of the federal Social Security Act applying therefor which complies with the provision of this article and the rules and regulations promulgated pursuant thereto, in accordance with the standards and procedures adopted by the state hospital review and planning council."
- PHL Article 28 governs licensure and oversight of hospitals. The sections relevant to this workshop includes:
  - Section 2801(4)(a) defines "hospital service" to mean "the preadmission, out-patient, in-patient and post discharge care provided in or by a hospital, and such other items or services as are necessary for such care, which are provided by or under the supervision of a physician for the purpose of prevention, diagnosis or treatment of human disease, pain, injury, disability, deformity or physical condition,

including, but not limited to, nursing service, home-care nursing and other paramedical service, ambulance service, service provided by an intern or resident in training, laboratory service, medical social service, drugs, biologicals, supplies, appliances, equipment, bed and board.”

- Section 2805-X governs the “hospital-home care-physician collaboration program” and invited integration initiatives “including but not limited to: “(i) transitions in care initiatives to help effectively transition patients to post-acute care at home, coordinate follow-up care and address issues critical to care plan success and readmission avoidance; (ii) clinical pathways for specified conditions, guiding patients' progress and outcome goals, as well as effective health services use; (iii) application of telehealth/telemedicine services in monitoring and managing patient conditions, and promoting self-care/management, improved outcomes and effective services use; (iv) facilitation of physician house calls to homebound patients and/or to patients for whom such home visits are determined necessary and effective for patient care management; (v) additional models for prevention of avoidable hospital readmissions and emergency room visits; (vi) health home development; (vii) development and demonstration of new models of integrated or collaborative care and care management not otherwise achievable through existing models; and (viii) bundled payment demonstrations for hospital-to-post-acute-care for specified conditions or categories of conditions, in particular, conditions predisposed to high prevalence of readmission, including those currently subject to federal/state penalty, and other discharges with extensive post-acute needs.”

Steps Taken: Under DSRIP, NY has issued waivers of Section 401.2(b) of Title 10 of the NYCRR allowing Provider Performing Systems to apply to have practitioners of Article 28 facilities provide services outside of the designated site of operation as listed on the facility’s operating certificate. Various projects have been initiated under this waiver, including projects that address care transitions between hospital to home in an effort to reduce 30-day readmissions for those with chronic health conditions. This may include care provided in the home setting.

At the federal level, alternative models for healthcare delivery piloted by CMMI specifically include care delivered by physicians, nurses and other health professionals in a home-based setting. Several of these pilot programs are operating in New York. Therefore it is important to reconcile healthcare quality, safety and efficiency within new delivery paradigms.

Possible Solutions to Discuss: This workgroup will explore regulatory/statutory options where appropriate to support high quality healthcare delivery for NY residents. Possible options to consider include the issuance of a clarifying policy document on when an entity has to be licensed; state law changes that allow PHL Article 28 facilities to offer post-acute care services in the home on a limited basis; clarifying processes to waive regulatory provisions where appropriate; and creating systems for seamless care transitions to home-based post-acute services.

Additional Sources: Additional background in preparation for this workshop includes:

- NY PHL Article 28: <http://public.leginfo.state.ny.us/lawssrch.cgi?NVLWO>
- NY PHL Article 36: <http://public.leginfo.state.ny.us/lawssrch.cgi?NVLWO>
- 42 CFR Part 484: <https://www.ecfr.gov>

## HEALTH CARE REGULATORY MODERNIZATION INITIATIVE

### Background Paper: Telehealth

#### Problem Statement:

Telehealth is a promising strategy for increasing access to health and behavioral health care services and improving efficiency in the health care delivery system. The delivery of care via telehealth has the potential to improve clinical care and patient outcomes, enhance patient satisfaction and reduce health care delivery costs. Although telehealth has been used widely for many years throughout some areas of the United States and abroad, health care providers and systems in New York State have identified a number of challenges to the rapid adoption and implementation of telehealth, primarily financial, statutory and regulatory barriers. As a result, the potential and opportunity for telehealth to impact health care delivery in New York State has not been fully realized.

The Department of Health (DOH), the Office of Mental Health (OMH), the Office of Alcoholism and Substance Abuse Services (OASAS), and the Office for People With Developmental Disabilities (OPWDD) license or certify providers who have pursued or wish to pursue telehealth arrangements to deliver care. Currently, these agencies have varying and distinct regulations, rules, and policies with respect to the use of telehealth, which can be confusing for providers, payers, patients, and the public. In addition, new telehealth technologies and models continue to emerge, creating a challenge for regulatory agencies to keep pace with a rapidly changing telehealth landscape.

New York State agencies have an interest in promoting telehealth to expand access to care in rural and underserved areas, mitigate provider shortages, improve coordination of care across the health care continuum, and extend integrated care between primary care and behavioral health settings. However, these regulatory bodies also have a responsibility to ensure that care delivered via telehealth is of high quality, clinically appropriate, and meets applicable standards of care. Furthermore, while New York state agencies are interested in identifying ways to reduce barriers and encourage innovation to expand the use of telehealth, there is agreement that telehealth encounters should not replace in-person care unnecessarily or solely based on provider or patient convenience.

To date, stakeholders have raised concerns about existing rules that place limitations on Medicaid reimbursement for care delivered via telehealth, including permissible communication modalities, originating and distant site requirements, eligible practitioner types, and types of services covered. Stakeholders have noted that commercial insurers have greater flexibility in how, when and what types of telehealth models are used, and in determining the rates of payment for services delivered via telehealth. In addition, stakeholders have cited a lack of clarity regarding existing New York State agency regulations, policies and guidance related to telehealth. Providers are unclear on what telehealth arrangements are permitted under existing law, particularly those that span across settings licensed by different agencies, what regulatory agency approvals are necessary to utilize and be reimbursed for telehealth encounters, and how to appropriately bill for telehealth services.

**Background:**

Various statutory and regulatory provisions govern the use and reimbursement of telehealth in New York State. In addition, DOH, OMH, OASAS, and the New York State Education Department (SED) have issued or proposed programmatic guidance and policies regarding the use of telehealth in licensed settings.

- DOH has provided reimbursement for telemedicine under the Medicaid Fee-for-Service (FFS) program since 2006. Under the Medicaid program, telemedicine is defined as “live, interactive, audio-visual communication between a patient at an originating site and a consulting provider at a distant site.” The Medicaid program last expanded its telemedicine coverage policy to additional settings and provider types, as outlined in the New York State Department of Health Medicaid Update dated March 2015.
- New York’s Telehealth Parity Law (Chapter 550 of the Laws of 2014, as amended by Chapter 6 of the Laws of 2015) took effect January 1, 2016. The law amended the Insurance Law, the Public Health Law and the Social Services Law to require commercial insurers (under the jurisdiction of the Department of Financial Services) and the Medicaid program (administered by the Department of Health) to provide reimbursement for services delivered via “telehealth” if those services would have been covered if delivered in person.

As enacted by the Telehealth Parity Law, Insurance Law §§ 3217-h, 4306-g and 4406-g provide that insurers may not exclude from coverage services otherwise covered under a policy because the service is delivered via telehealth. Under the Insurance Law, “telehealth” is defined broadly as “the use of electronic and information and communication technologies by a health care provider to deliver health care services to an insured individual while such individual is located at a site that is different from the site where the health care provider is located.”

The Telehealth Parity Law also enacted Public Health Law (PHL) Article 29-G, which includes definitions relevant to the provision of services by means of telehealth modalities for purpose of Medicaid reimbursement (PHL § 2999-cc). Social Services Law (SSL) § 367-u, as referenced by PHL § 2999-dd, provides that subject to federal financial participation, health care services delivered through telehealth as defined in PHL Article 29-G shall not be excluded from Medicaid reimbursement.

- Effective February 11, 2015, OMH established the basic standards and parameters for use of “telepsychiatry” in OMH-licensed clinic programs. Adopted as a new Section 599.17 to 14 NYCRR Part 599, “Clinic Treatment Services”, this new regulation allowed telepsychiatry to be utilized for assessment and treatment services provided by physicians or psychiatric nurse practitioners, from a site distant from the location of a recipient, where both the patient and the physician or nurse practitioner were physically located at clinic sites licensed by OMH. Effective August 31, 2016, OMH repealed Part 599.17 and adopted a new Part 596 which expanded the use of telepsychiatry beyond licensed Article 31 outpatient clinic settings. The expansion allows for the use of telepsychiatry between any OMH licensed setting and any NYS Medicaid enrolled setting, if the patient is in the

OMH Article 31 site. Current exclusions include: ACT or PROS programs, use for medication over objection, restraint and seclusion ordering, and Article 9 commitments. 14 NYCRR § 596.6(c) provides that OMH shall post implementation guidance on its website. OMH issued guidance entitled "Telepsychiatry Guidance for Local Providers," which focuses on clinical guidelines, training resources, billing guidance, and technological standards. More recently, OMH issued guidance entitled "Telepsychiatry Guidance for Contracting with Telepsychiatry/Telemedicine Companies" that outlines standards for OMH-licensed providers that wish to expand the pool of available practitioners by entering into a contractual arrangement with a telemedicine company.

- OASAS regulations implementing "telepractice" are under development. Proposed 14 NYCRR § 830.5 provides that OASAS shall post standards on its public website to assist in the provision of telepractice services. Such standards shall include clinical practice guidelines specific to telepractice and buprenorphine prescribing and technology guidelines.
- OPWDD has established a workgroup to discuss implementation of telehealth services for people with intellectual and developmental disabilities. This workgroup is reviewing the agency's current regulations, policies and practices to identify whether changes are necessary to ensure successful implementation. The group is also drafting clinical and technical standards, as well as guidance documents, to assist providers offering services via telehealth to their patients.
- SED issued general guidance in 1999 related to "telepractice," defined as "the provision of professional service over geographical distances by means of modern telecommunications technology." The guidance identifies various risks surrounding telepractice, and stresses the need for coordination and consultation with State Boards for consistent telepractice implementation, as well as consumer education to inform the public of telepractice limitations.

Other Public Health Law provisions related to telehealth include the following:

- Public Health Law § 3614-3(c) authorizes home telehealth reimbursement for certified home health agencies and long-term home health care programs to use remote monitoring for patients with conditions requiring frequent monitoring.
- Public Health Law §2805-u authorizes that Article 28 originating telemedicine "spoke" site hospitals, pursuant to a written agreement with a distant "hub" site hospital, may rely on the credentialing and privileging decisions of the distant "hub" site hospital when granting or renewing privileges to a health care practitioner who is a member of the clinical staff at the distant "hub" site hospital.

#### Steps Taken:

Laws, regulations, and reimbursement policy surrounding telehealth vary significantly from state to state. The Center for Connected Health Policy, a nonprofit, nonpartisan organization, routinely monitors state and federal telehealth legislation and publishes a guide bi-annually on their website ([www.cchpca.org](http://www.cchpca.org)) that summarizes telehealth-related policies, laws, and regulations for all 50 states. In 2015, New York became the 22<sup>nd</sup> state to pass telehealth parity legislation.



Since the passage of the Telehealth Parity Law, NYS Medicaid has sought State Plan Amendments (SPA) from CMS to approve reimbursement for additional telehealth modalities, including remote patient monitoring and store-and-forward. The NYS Medicaid Program will soon issue policy guidance to support implementation of the Telehealth Parity Law. A Medicaid Update is currently under development that will include updated telehealth billing guidance, as well as guidance around confidentiality, patient consent, and technical considerations for providers.

The New York State Medicaid Program is also exploring the use of a federal “in lieu of” regulation that would allow Medicaid Managed Care (MMC) plans to propose changes to their benefits packages to include telehealth modalities and arrangements outside of what is currently eligible for reimbursement under PHL Article 29-G, if they can demonstrate that those services are “cost-effective” and “clinically sound.”

#### Possible Solutions to Discuss:

New York State agencies recognize that telehealth is a valuable tool for improving access to health and behavioral health services, and that telehealth can support the provision of coordinated, patient-centered care to avoid unnecessary hospitalizations and promote better health outcomes. This workgroup will explore the statutory, regulatory, and policy provisions governing use of telehealth in New York State, with the goal of ensuring that the rules and standards across agencies are consistent, aligned, and allow for adequate flexibility as new telehealth models emerge, while protecting patient safety, privacy, and confidentiality, and safeguarding quality of care.

Potential statutory, regulatory, and policy changes to consider include:

- Expansion of practitioner types included in Public Health Law § 2999-cc (2) that are eligible to receive Medicaid reimbursement as a telehealth provider.
- Expansion of the list of settings included in Public Health Law § 2999-cc (3) that are eligible originating sites, to potentially include a patient’s home.
- Development of agency guidance to clarify for providers and consumers what is currently permitted under statutes and regulations governing the use of telehealth in New York State.

#### Additional Sources:

##### *Statutes:*

- NY PHL Article 29-G. Telehealth delivery of services: <http://law.justia.com/codes/new-york/2016/pbh/article-29-g/>
- NY PHL § 3614 3-c. Home telehealth: <http://law.justia.com/codes/new-york/2016/pbh/article-36/3614/>
- NY PHL § 2805-u. Credentialing and privileging of health care practitioners providing telemedicine services: <http://law.justia.com/codes/new-york/2016/pbh/article-28/2805-u/>

##### *Regulations:*

- New York State Office of Mental Health. Part 596 of Title 14 of the NYCRR (Telepsychiatry Regulations):  
[https://www.omh.ny.gov/omhweb/policy\\_and\\_regulations/adoption/596.599.text.8.11.16.pdf](https://www.omh.ny.gov/omhweb/policy_and_regulations/adoption/596.599.text.8.11.16.pdf)

*Policy Guidance/Standards:*

- New York State Department of Health. Medicaid Update, March 2015 - Policy and Billing Guidance, "Telemedicine Coverage to be Further Expanded," pages 18-21.  
[http://www.health.ny.gov/health\\_care/medicaid/program/update/2015/mar15\\_mu.pdf](http://www.health.ny.gov/health_care/medicaid/program/update/2015/mar15_mu.pdf)
- New York State Office of Mental Health. Telepsychiatry Guidance for Local Providers.  
<https://www.omh.ny.gov/omhweb/guidance/telepsychiatry-guidance.pdf>
- New York State Office of Mental Health. Telepsychiatry Guidance for Contracting with Telepsychiatry/Telemedicine Companies.  
[https://www.omh.ny.gov/omhweb/clinic\\_restructuring/telepsychiatry-contracting-guidance.pdf](https://www.omh.ny.gov/omhweb/clinic_restructuring/telepsychiatry-contracting-guidance.pdf)
- New York State Education Department. Telepractice Guidance, November 1999.  
<http://www.op.nysed.gov/reports/telepractice.pdf>

*Federal/National Resources:*

- Center for Connected Health Policy. State Telehealth Laws and Reimbursement Policies, April 2017.  
<http://www.cchpca.org/sites/default/files/resources/50%20STATE%20PDF%20FILE%20APRIL%202017%20FINAL%20PASSWORD%20PROTECT.pdf>
- Federal "In Lieu Of" regulation. Center for Medicaid and Medicare Services, Final Rule, 5/6/2016. Medicaid and Children's Health Insurance Program (CHIP) Programs; Medicaid Managed Care, CHIP Delivered in Managed Care, and Revisions Related to Third Party Liability  
<https://www.federalregister.gov/documents/2016/05/06/2016-09581/medicaid-and-childrens-health-insurance-program-chip-programs-medicare-managed-care-chip-delivered>